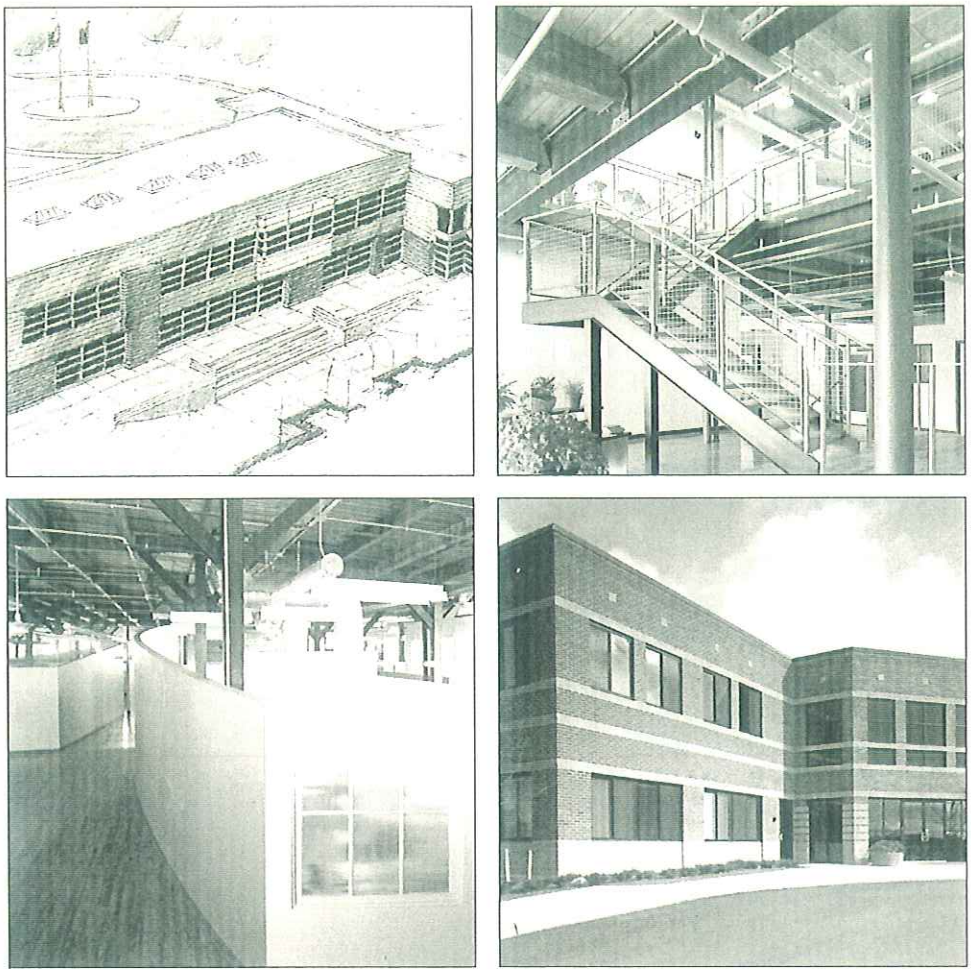

Technical Proposal for Architectural Services:

State of Vermont

Waterbury Office Complex – Feasibility Study

December 6, 2011

SCOTT + PARTNERS
ARCHITECTS

SCOTT + PARTNERS
ARCHITECTS
20 main street essex junction vermont 05452
www.scottpartners.com
p. 802.879.5153
f. 802.872.2764

State of Vermont Waterbury State Office Complex Feasibility Study

Technical Proposal

Table of Contents:

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Executive Summary

After the devastating effects of Tropical Storm Irene, the State of Vermont has found itself in the difficult situation of deciding the future direction for the Waterbury State Office complex. Due to the extensive damage from the storm that left most buildings unusable the State now is in the position of having to decide a direction and future for the majority of the buildings in the Complex and finding a permanent home for the many State workers who previously occupied the site. This decision is made more difficult due to many factors, including;

- The population of state workers in Waterbury has a very direct and positive affect on the economy of the Town, and wellbeing of many businesses in Waterbury.
- The State has a responsibility to the taxpayers of Vermont to find the most reasonable and economical solution for the long term.
- Most of the buildings are significantly historic, as is the site itself.
- The State has put a significant investment into the site over the years.
- Many of the State workers have planned other aspects of their lives around working at that location.

We understand that the State, if they were to choose to either renovate the existing structures at the Waterbury Complex and/or build new, intends to embrace a vision of an energy efficient, sustainable community of buildings. We understand and fully appreciate that vision and our experience with past projects both at the WSOC and other sites in Vermont will allow us to move this project in the direction it needs to go.

Intent and Scope of Services:

It is our intent to provide the required architectural and design services, including master planning, historic preservation consulting, landscape design, civil, structural, mechanical, electrical for the **Return and Full Reuse option only.** Our goal is to provide the State with a complete analysis of the existing buildings and site to assess the viability and feasibility of re-developing the existing buildings. We will provide the reports as necessary and schematic design work required for any proposed new buildings on site. We will then propose an overall master plan for the entire site with the goal of developing the existing WSOC into a functional, efficient and thriving community for the State Offices.

For reasons of efficiency, we have outlined in detail our proposed approach and complete scope of work in Criterion 4 of the proposal. We feel confident that this is a thorough and complete scope of work, and our approach to the determination of the feasibility of the Return and Full Re-use option as outlined on the RFP will be completed to you satisfaction.

Project Team:

We have put together a very well qualified team of consultants who are able to provide the quality of services required by a project such as this. We have outlined below the general structure and team organization.

Scott + Partners, Inc. is the lead consultant and Team Leader for this project. Scott + Partners is a nine person firm located in Essex Junction, Vermont since 1988. Staffing includes two partners, Tyler Scott, A.I.A. and John Alden, A.I.A., one additional architect, Joel Page, A.I.A., three project managers/designers, and three support staff. Refer to additional firm information below.

In addition to project management, S+P will be responsible for the architectural assessment of the buildings, including the analysis of building envelopes, assessment of functional feasibility, coordination of team members and presentations to State. In addition, we are proposing the following consultants;

H. Keith Wagner Partnership Landscape Architects and Planners. (HKW) Jeff Hodgson, ASLA	HKW will be a key consultant in the development of overall master planning including landscaping, parking, walks, siting of new buildings, and long term site maintenance strategies.
Suzanne Jamele Historic Preservation Consultant	Responsible for ensuring overall master plan considers effect on historic buildings and overall site. Will assess each building for historic significance and assist in determination of which buildings should remain or could be removed.
Engineering Ventures (EV) Civil and Structural Engineers. David Boehm, P.E. Robert Neeld, P.E.	Responsible for preliminary structural assessments of existing buildings. Responsible for planning and developing flood proofing concepts for individual buildings.

LN Consulting Mechanical and Electrical Engineers Wayne Nelson, P.E. Paul Lekstutis, P.E.	Responsible for the assessment of and conceptual design for the individual building MEP systems and the development of an overall energy master plan for the site, including options for on-site energy generation, wood chip heating systems, solar and ground water heating. Will also assess electrical distribution systems.
Energy Balance Andy Shapiro	Responsible for assessing opportunities for energy savings for the various building types. Will work closely with S+P and LN on moisture and energy flows through building envelopes. Goal is to develop energy package by building type through energy modeling.
Barden Consulting Services Tom Barden	Responsible for developing preliminary level cost estimates of the overall master plan.

Firm Profile:

Scott + Partners, Inc. is a full service architectural firm located at 20 Main Street, Essex Junction, Vermont We are a corporation and have been in existence for 24 years. We currently have a staff of nine people with a wide variety of skills and experience. We provide planning and design services for a variety of building types throughout Vermont and the Northeast. We enjoy the challenge of new products, and for this reason we maintain a diverse practice that includes health care, laboratory, educational, religious, commercial, and residential projects. Given this diversity, we do not integrate any one particular style into our work, but strive to carefully incorporate the demands of function, budget, and context to create buildings and spaces of enduring value and interest for our clients.

We believe that an engaged, collaborative design process involving the client and the design team will bring out the most innovative and successful design solutions for any project. Our experience and understanding gives us the ability to integrate issues of client program, context, environment, aesthetics and budget to develop creative and effective design solutions that exceed our client's goals. Connecting these issues into the overall building design process is vital to the long term success and sustainability of a project.

Our role in the **design process** is to:

- Listen carefully to the client and users
- Communicate clearly and directly with all parties involved
- Provide practical design alternatives and recommendations
- Develop responsible, effective design solutions in a timely manner

To ensure continuity of communication and responsibility, a principal of the firm will be involved with every project for the entire process, from the beginning through construction. We will select a team of consultants as part of the design team for each project based on engineering needs, consultants' experience and client input. We involve the consultants fully during the design process in order to ensure that the client's needs are understood firsthand by all those involved in the design.

Additional Qualifications:

- During the last five (5) years, Scott + Partners and to the best of our knowledge the selected consultants have not had a contract terminated for any reason.
- During the last five (5) years, Scott + Partners and to the best of our knowledge the selected consultants have not been assessed any penalties under any existing or past contracts.
- During the last five (5) years, Scott + Partners and to the best of our knowledge the selected consultants have not been the subject of any order, judgment or decree of any federal or state authority barring, suspending or otherwise limiting the right of Scott + Partners and our Design Team to engage in any business, practice or activity.
- Scott + Partners and to the best of our knowledge the selected consultants do not have any pending or threatened litigation, administrative or regulatory proceedings that could affect our ability to perform the required work for this project.

Criterion 1: Credentials and Qualifications:

Please Note: We have included all consultants experience and staff resume's at the end of Criterion 1.

- Has the Team had experience with similar master planning projects of this scope and magnitude?

This is a uniquely challenging project in its requirement to integrate so many factors in the planning process. The overall master planning process will need to include the entire project team's expertise and the staff of BGS. We see this aspect of the project as not being just one consultant's effort but a concerted effort with input over the two month period from all the consultants. Therefore, we will be relying on everyone's input to formulate a vision of what this campus could be if it were to return to a State Office Complex as per the "Return and Full Re-Use" option listed. **Scott + Partners** has been involved in master planning studies for the following projects:

- **Thayer Commons**: We were hired by Housing Vermont and Cathedral Square Corporation to plan and design the Thayer Commons development for the which involved the development of 66 Units of affordable senior housing, 33 units of affordable family housing, on site parking and recreations facilities, connections to the City of Burlington public transportation systems and adjacent retail developments. **H. Keith Wagner's office** served as a consultant for the master planning and landscape design for this project.
- **Thatcher Brook Elementary School Campus**: S + P worked with the Waterbury School District over several years to determine the options for the Thatcher Brook Elementary campus which includes three historic buildings dating from the late 1800's to the 1920's. Studies involved planning for parking, recreation, and energy efficiency upgrades. Eventually we were involved in the full renovation and reconstruction of the buildings and site.
- **Town of Essex Municipal and Educational Facilities Master Planning**: S+P has served as a consultant to both the Town of Essex and the Essex School District over the past several years to determine long range strategies for their various facilities.
- **Autumn Pond Senior Living**: S+P was retained to provide master planning services for the development of a $26M comprehensive senior living development in Essex Junction, Vermont. Services included development of site development options, schematic design of the various

building types, and permitting work and negotiations with the Village of Essex Junction. Civil engineering design consultant was Krebs & Lansing.

H. Keith Wagner Partnership has extensive experience in master planning for college campuses, downtowns and new mixed-use developments. Early in his career Keith Wagner worked on the Settler's Green Mixed-Use Development, North Conway, New Hampshire; and the Arkwright Corporate Headquarters, Waltham, Massachusetts, master planning these large developments. More recently he has completed master planning projects for Burton Snowboards Headquarters and the $175M redevelopment of Downtown Winooski both here in Vermont. The downtown Winooski Redevelopment project was the recipient of the 2006 Smart Growth Award from the Vermont Forum on Sprawl. Jeff Hodgson has experience master planning for commercial, park and institutional clients. Past projects include the Monsanto World Headquarters, St. Louis Missouri; Briarwood Office Park, Ann Arbor Michigan; University of Cincinnati, Cincinnati Ohio; Louisville Waterfront Park, Louisville Kentucky and Guadalupe River Park, San Jose California. More recent projects include college campus master planning projects for Clarkson University, Potsdam New York; Salem State University, Salem, Massachusetts and Westfield State University, Westfield, Massachusetts. Master planning for mixed-use development includes Shelburnewood Community, Shelburne, Vermont and the Downtown Winooski Redevelopment.

LN Consulting has been involved with several Campus Energy Master Planning & Central Energy Plants and Distribution projects, including;

- **University of Massachusetts Steam Line Replacement Projects (Two)**
- **Green Mountain College High Voltage Power Distribution Replacement and Upgrades Project**
- **Copley Hospital Master Plan and Boiler Plant Project**
- **Burlington College – Campus Master Plan Project**

Please refer to their individual project resumes for additional projects and information.

- Has the Team had experience with LEED rated system projects?

We are familiar and experienced with the LEED certification process. S+P has recently completed a $12.2M project for Dealer.com that is currently in the process of being LEED certified. In addition, we completed a $4.7M LEED Silver certified project for Dealer.com in 2007. Both were certified through the Major Renovation process. We have been the architects on other commercial projects where the client

wishes to adhere to the process, but not incur the direct costs of the LEED process, so no formal certification was achieved. As important our consultants, including HKW and LN have also been involved with several LEED certified projects.

LN Consulting has completed the design of thirteen buildings that have LEED certification (three platinum, five gold, five silver), completed the design of another five buildings that are registered and awaiting LEED certification, and are working on the design of another five projects that are to be registered in the LEED certification process. Wayne Nelson, P.E. is a LEED accredited professional. Please refer to their individual project resumes for additional information.

- Has the Team had experience with high efficiency energy projects?

S+P has been involved with high efficiency energy projects as has LN consulting. Recent projects by S+P include:

- **East Montpelier Emergency Services Building**: This project incorporated super-insulated (R-40) exterior walls, R- 60 roof insulation, and a continuous vapor and air barrier. Mechanical systems include Demand Based Ventilation system, air to air energy recovery, radiant floor heating, on-demand water recirculation pumps, and a wood pellet fired primary heating source with LP back-up. This project won a "Best of the Best" award from Efficiency Vermont in 2010. Consultants included ICE mechanical engineering, Lamberton electrical, and Energy Balance for overall energy consulting.
- **State of Vermont Forensics Laboratory Building**: This project was designed in association with HDR Architecture. Our role on this project was the design of a highly energy efficient building envelope. For this we developed a system that included 4" of spray foam over the exterior sheathing encased between 4" fiberglass C channels to reduce through wall conductance and allow the attachment of both masonry and ACM panel cladding. The glazing was all triple glazed solar grey in a thermally broken curtain wall system. The roof system incorporated an R-60 minimum insulation. This project won a "Best of the Best" award from Efficiency Vermont in 2010. All MEP and structural engineering was provided by HDR. Energy Balance provided building envelope design consulting and commissioning services.
- **Instrumart Building Renovation**: This project a complete gut and renovation of a 14,000SF one story commercial building constructed in 1981 for occupancy by office and warehouse functions.

The entire exterior envelope was rebuilt to incorporate 3" insulated wall panels and R-19 insulation within the interior cavity wall for a total exterior R-value of R-40 (R-33 whole wall R-value). Complete air barriers were provided by adding new exterior Dense-glass sheathing with all joints taped and sealed and Tyvek commercial Wrap air barrier. Mechanical upgrades included new gas fired high efficiency furnace units with DDC controls. Lighting includes direct/indirect pendant fluorescent fixtures with T-50 and T-50HO lamping throughout and occupancy & daylighting sensors. This building has been certified as Energy Star eligible with approximately 56,500 kWh ($9,040) savings per year.

In addition, **LN consulting** has been involved with several high efficiency projects including;

- **The NRG Systems Expansion Project, Hinesburg, VT**. The project has achieved LEED Gold certification and was awarded the Better Building by Design Award in 2009.
- **Champlain College Perry Hall Renovation Project.** The project has achieved LEED NC 2009 Platinum Certification.
- **University of Vermont – Given Building Infill Project.** The project accomplished LEED Gold certification.

Please refer to enclosed information on the consultants for more extensive project listings.

- Has the Team had experience with historic analysis and renovation?

As part of the overall team, Sue Jamele will be assisting us and guiding the historic analysis process for each of the buildings. Her experience will give us the experience and judgment needed as we look at the overall project. Regarding specific renovation projects, Scott +Partners has been involved with historic building analysis and renovation projects since 1990. Specifically, we have completed several that incorporated challenging energy efficiency upgrades for both office and housing occupancies. A selected list of those projects is as follows:

- **State of Vermont Department of Public Safety Building, Waterbury, VT. (2011):** S+P was retained to design a method to increase the energy efficiency of the building envelope for this 1940's era three story masonry building. Working with Andy Shapiro of Energy Balance, we developed a method of insulating the existing exterior wall from the interior with 4 inches of spray foam, air sealing, and replacing all the existing windows with new triple pane double hung windows. As part of the process, a complete brick analysis was done. The masonry was re-pointed, the pre-cast concrete coursing and entry surrounds were reconstructed and the

foundation repaired. In addition, the building HVAC systems were completely renovated to provide more efficient hot water heating and ventilation systems. All design work was done in coordination with the Division of Historic Preservation. This project is still under construction. The construction value is approx. $4.2M

- **Richford Main Street Mill Housing Project, Richford, VT. Hartland Development Group (2005):** S+P was the project architect on the complete gut and renovation of the old Sweat-Cummings furniture factory, a 45,000SF four story masonry structure in downtown Richford. This project included insulating the exterior walls with 3" of sore foam, replacing all the old industrial sash windows with insulated operable metal sash windows, new high efficiency hot water and fan coil HVAC systems, and energy efficient lighting systems. The building has four occupancies; A supermarket on the ground floor, a health clinic and pharmacy, senior housing, and a dental clinic. S+P was the architect for all tenant fit-up work, the overall building shell renovation, and site redevelopment. We worked closely with the Division of Historic Preservation and the Department of the Interior Standards to ensure the owner would secure the Historic Tax Credits.

- **Vermont Transit - Bus Barns Housing Project, Burlington, VT. Housing Vermont (2002).** This mixed use project incorporated the complete gut and renovation of two historic brick buildings and the addition of a new 12 unit apartment building on a site in the old north end of Burlington. The two historic buildings were once occupied by the Vermont Transit Company and maintenance garages for their busses and trolleys. Although both buildings were insulated to achieve a high level of energy efficiency, the methods were different due to the different construction and masonry types on each building. In addition, all windows were replaced with new energy efficient units; The Trolley Barn received new industrial sash units with storms and the Bus Garage received insulated wood/clad double hung units and new storefront to replace the original large overhead doors. The entire campus heating is a central hot water system with buried insulated hot water lines. We worked closely with the Division of Historic Preservation and the Department of the Interior Standards to ensure the owner would secure the Historic Tax Credits.

- **The Hall Block Project, Burlington, VT. Redstone Commercial Group.** S+P was the project architect for the renovation of the Hall Block in downtown Burlington. This is a four story

masonry building housing office & retail occupancies. The building was completely gutted and brought back to the approximate original appearance by recreating the original window openings and window types. The building was also redesigned to comply with current building codes and new HVAC and electrical systems were installed. This project won the Burlington Architectural Excellence Award in 2009.

- **Jericho Municipal Building, Jericho, VT.** S+P was the project architect for the renovation and addition to this building in 2009. The work included the analysis, redesign, and reconstruction of a three story historic wood framed building to meet the current functional needs of the Town offices, building codes and provide an energy efficient building for the future. The interior was completely gutted and the exterior shell was completely renovated to meet Division of Historic Preservation and Department of Interior Standards.

In addition to our projects, Engineering Ventures and LN Consulting each have been involved with several historic preservation projects. We will be working closely with Sue Jamele and the Division of Historic Preservation on the analysis of the buildings at the Complex.

- Has the team been involved with floodproofing existing and/or new buildings?

Scott + Partners, along with Engineering Ventures are currently involved with a study of the State Environmental and Agriculture Lab Building with Engineering Ventures. For this project we have developed a schematic concept for the floodproofing of the building while taking into account the various site issues surrounding the building. It should be noted that the flood proofing for this project will be considerably more challenging, given the density and arrangement of the buildings.

Engineering Ventures has been involved with several studies as noted on their resume, including, among others;

- **Flood mitigation study** and civil engineering evaluation of flood mitigation strategies for a very large manufacturing facility, located on an 800 acre, campus like site, adjacent to a major river in central NYS. The evaluation included consideration for flood control berms and demountable flood control barriers.
- **Burnham Hall, Lincoln, VT**

- **Barre Old Labor Hall, Barre, VT**
- **Mt. Anthony Union High School, Bennington, VT**
- **Freeman Hall, Champlain College, Burlington, VT**

Please refer to enclosed information on the consultants for more extensive project listings.

Project Team Resumes and Relevant Recent Project Information

Scott + Partners, Inc.

Tyler M. Scott, A.I.A.
PRINCIPAL

Tyler Scott is the principal and founder of Scott + Partners, Inc. He has been involved in the field of architecture since 1978, and has worked on health care, housing, education, and commercial projects in Washington, Alaska, Montana, Vermont, and Virginia. Tyler is responsible for the direction and management of the firm, and is also directly involved in the management of various projects, primarily in health care laboratories and affordable housing.

Education . . . . . 2008 – Montana State University
Master of Architecture

1983 – Montana State University
Bachelor of Architecture

1977 – Kent State University
Bachelor of Environmental Studies

Certification . . . . . Registered Architect, State of Vermont, No. 1509

Membership. . . . . The American Institute of Architects
U.S. Green Building Council
NFPA

Awards. . . . . Efficiency VT 2011 Award – State of VT Forensics Lab
Efficiency VT 2011Award – East Montpelier Emergency Services Building

Employment . . . . . 1987 – Present: Principal of Scott + Partners
1984 – 1987: Colin P. Lindberg, Architect
1983 – 1984: Anderson Associates
1982 – 1983: Linda Brock, Architect
1980 – 1981: Kommers, McLaughlin & Leavengood
1978 – 1980: Anderson Associates

Selected Projects . . . . . State of VT Forensics Lab, Waterbury, VT
Dealer.com South Addition, Burlington, VT
TTI, Williston, VT
Timberlane Dental Group, South Burlington, VT
Essex Senior Housing, Essex, VT
Middlebury South Village Apartments, Middlebury, VT
Bus Barns Housing Project, Burlington, VT
UVM Proctor Maple Research Center, Underhill, VT
Essex Community Educational Center, New Library, Essex Junction, VT
120 Kimball Ave. Office Building, South Burlington, VT
Offices for Jager DiPaolo Kemp Design, 47 Maple St., Burlington, VT
Select Design Facility Expansion, Burlington, VT

John B. Alden, A.I.A., NCARB
PARTNER

John Alden has been a licensed architect since 1993 and has experience in all areas of architecture and project management. He has worked on many institutional and educational projects in Vermont, New York and other New England states ranging in size from $100,000 to $20 million dollars. John's primary responsibilities have been in facility evaluations, project development, programming, design, code compliance, budget tracking, facilities management and team management.

Education . . . . . 1988 – State University of New York at Buffalo
Master of Architecture

1982 – University of Vermont
BA – Classical Civilizations and Political Science

Certifications . . . . . Registered Architect: States of VT, NH, NY, MA
Certificate – Center for Building Renovation-Preservation, Rouen, France
Architectural Conservation Workshop, University of Vermont

Membership. . . . . The American Institute of Architects
National Council of Architectural Registration Boards

Published . . . . . A Contemporary Greek Revival,
Journal of Light Construction, April 2000

Employment . . . . . .1999 – Present: Scott + Partners (Principal 2004)
1994 – 1999: Dore & Whittier, Inc.
1989 – 1994: Quinlivan, Pierik, and Krause, Architects

Selected Projects . . . . . Fitness Edge Day Care Center, Williston. VT
Sports and Fitness Edge of Williston, Fitness Center, Williston, VT
The Brownway Residence- Addition, Enosburg Falls, VT
Randolph Town Hall, Randolph, VT
FAHC Endocrinology Clinic Fit-up, S Burlington, VT
Georgia Municipal Fire Station, Georgia, VT
East Montpelier and Calais Emergency Services Building, East Montpelier VT
Essex Town Schools, Facilities Analysis and ongoing projects, Essex, VT
Thatcher Brook Primary School, Waterbury, VT
FAHC Orthopaedics Specialty Center, S. Burlington, VT
FAHC Cardiology/Cardiac Rehab Gym, S. Burlington, VT
Jericho Municipal Building Renovation, Jericho, VT
Essex Community Educational Center, New Library, Essex Junction, VT
IBM, Building 968, Clean Room Design (4 projects), Essex Junction, VT
Central Administration Office, Essex Town Schools, Essex, VT

Joel R. Page, A.I.A.
PROJECT ARCHITECT

Joel Page joined the firm in 1996, with a background in residential construction, and solar energy system integration and management. For Scott + Partners, Inc, Joel has worked on a variety of projects primarily affordable housing and health care projects. In addition, Joel has extensive experience with multi-family housing, historic preservation work and energy efficiency projects.

Education . . . . . .1995 – Vermont Technical College
Assoc. in Applied Science

1984 – Bates College
Bachelor of Arts

Certification . . . . . Registered Architect, State of Vermont, No. 3010

Membership. . . . . .The American Institute of Architects
National Council of Architectural Registration Boards

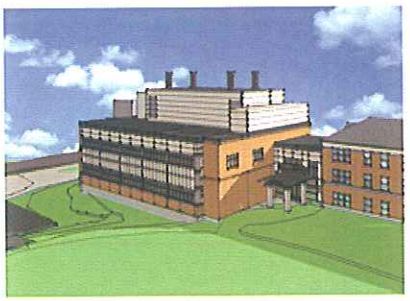
Employment . . . . . 1996-present – Scott + Partners, Inc.
1994-1995 – 5 Depot Architects, Windsor, VT

Selected Project Experience . . .
State of Vermont Forensics Lab
Heritage Toyota Vehicle Service Facility
FAHC Dermatology Project
Richford Main Street Mill Housing Project
Callahan Housing Project
Essex Senior Housing
Vergennes Smallest City Housing
VT Transit Bus Barns
Smith House Project
CVMC/FAHC Renal Dialysis Facility
NCH Renal Dialysis Facility

Kent D. Eaton
ARCHITECTURAL DESIGNER

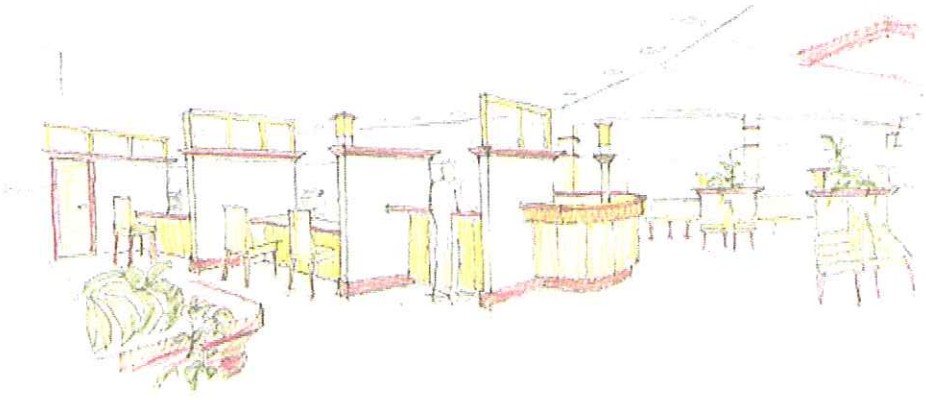
Kent Eaton joined the firm in 2007 with a strong background in design and construction. He has a demonstrated ability to organize complex design elements into cohesive projects. For Scott + Partners, Kent has worked on a variety of projects with a focus on municipal, commercial and health care building types.

Education . . . . . 1981 – Rensselaer Polytechnic Institute
Bachelor of Arts



Employment . . . . . 2007-present – Scott + Partners, Inc.
2006-2007 – Consultant, Architectural Support Services, Jericho, VT
1999-2006 – Owner, SoHo2go® arKITecture, Jericho, VT
2000-2001 – Carpenter, A&M Construction, South Burlington, VT
1993-1999 – Senior Designer, M.B. Cushman Design, Inc., Stowe, VT
1983-1993 – Consultant, Architectural Support Services, Troy, NY
1981-1983 – Co-owner, Kemp Building Graphics, Troy, NY
1981-1982 – Draftsman, LD Design Workshop, Troy, NY

Selected Project Experience . . . . . Brownway Residence
FAHC McClure Café & Grill
FAHC Orthopaedics Specialty Center
Sports and Fitness Edge Renovations
Randolph Municipal Offices
Jericho Municipal Building
Counseling Services of Addison County Office Building
VT Center for Cancer Medicine



Jamie Gravel
PROJECT DESIGNER

Jamie Gravel joined the firm in 2010, with a background in commercial architecture as a project designer. She has served as a project manager and designer with Scott + Partners, working primarily on the Dealer.com south Addition and Solarium projects. Other projects include the St. Mark's feasibility study, and the Associates in Periodontics fit-up project.

Education . . . . . Roger Williams University
Bachelor of Architecture

Employment . . . . . 2010-present – Scott + Partners, Inc.
TruexCullins
Bast & Rood Architects
Morris Switzer & Associates
Freelance Design

Selected Project Experience . . . . . Dealer.com Ph 1 South Addition
Dealer.com Ph 2 Solarium
Roman Catholic Diocese Office Relocation
Associates in Periodontics

Tonya M. Forcier
PROJECT DESIGNER

Tonya Forcier joined the firm in 2005 with a background in residential and graphic design as well as digital modeling. For Scott + Partners, Inc., Tonya has worked on many commercial, medical, renovation and multi-family housing projects.

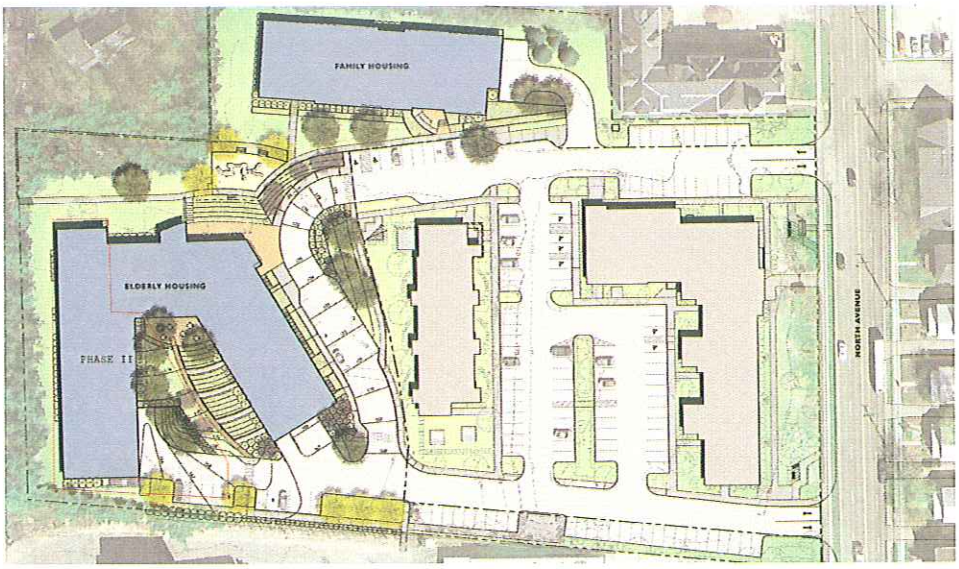
Education . . . . . 2005 – Norwich University
Master of Architecture
2004 – Norwich University
Bachelor of Science in Architectural Studies

Employment . . . . . 2005-present – Scott + Partners, Inc.
2004 – 2005 The Cushman Design Group (Residential Design) - Stowe, VT
2001 – H.P. Cummings Construction, Woodsville, NH
1997-2000 – Medical Secretary – Central VT Physicians Practice Corporation, Berlin, VT

Selected Project Experience . . . . . .
Dr. Nancy Carlson Fisher – Gynecology and Medical Spa
Timberlane Pediatrics Renovation
Timberlane Dental Renovation and Expansion
FAHC – Orthopaedics Specialty Center
Counseling Services of Addison County – 89 Main Street
Howard Center
State of Vermont Forensics Crime Laboratory
Essex Senior Housing
Village at Autumn Pond Assisted Living Community
State of Vermont Emergency Operations Center
Middlebury South Village Apartments
237 North Avenue Apartments
Sand Bar Inn and Town Houses
Christ the King School Renovation
Thatcher Brook Primary School Renovation and Expansion
Champlain Consulting Engineers Renovation
Bibens ACE Hardware
Roosevelt Plaza – Building A + B Office Complex
Dealer.com
Project Graphics

Thayer Commons

Burlington, VT



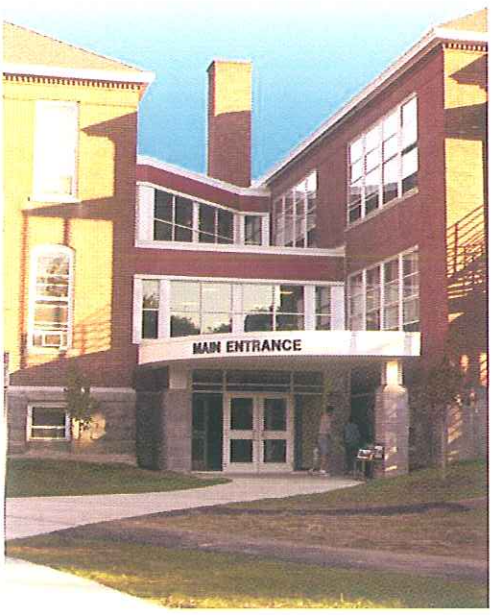
Project Scope:

This project began as master planning of a new family and senior housing community and has evolved into two separate housing projects. Avenue Apartments will be a three story, 38,169 s.f. energy efficient affordable housing building. This building will house 33 apartments plus a parking garage and will incorporate PV electric and solar hot water systems.

The Senior Housing project will be a three story 70,785 s.f. senior living building. This phased project will house 62 senior living apartments plus a parking garage below in the first two phases, and provide amenities for an inclusive living experience for senior residents of various levels of mobility.

Thatcher Brook Primary School

Waterbury, VT



Project Scope:

68,000 s.f. renovation to provide new classroom and support space for K-4 school

Design Challenges and Solutions:

- Designed to provide upgrades to life safety codes, ADA and educational standards
- Revised bus, traffic and parking layouts
- Restoration and integration of three existing historic structures
- New upgraded mechanical, electrical and data systems

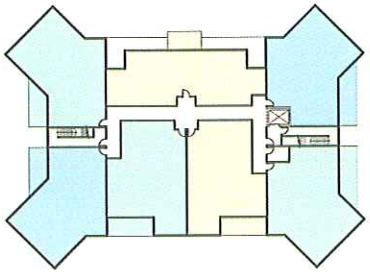
Autumn Pond Senior Living Facility

Essex Junction, VT

ALF ELEVATION 1

MRH 2 ELEVATION

LUX ELEVATION



LUX TYP. FLOOR PLAN

Project Scope:

Conceptual design and permitting for a new community development for seniors (55 years and older), where each resident would have individual identity, freedom, pride, and independence with the security of lifetime care within their home. Development to include 90 units of subsidized and non-subsidized senior rental housing, separate Alzheimer unit, 142 privately owned condominium units (for a total of 382 units or 566 bedrooms), community center, physician's office, physical therapist's office, barber/ beauty shop, pool, library, café, kitchen, craft shop and employment center.

Design Challenges and Solutions:

- Create large scale community without expanding amount of land currently covered by buildings.
- Strong neighborhood feelings about scale, density, traffic impact, and connection to surrounding community.
- Proximity to wetlands

PROJECT

East Montpelier Fire Station

East Montpelier, VT

Project Scope:

7,500sf four-bay fire and rescue "Emergency Services Building" serving East Montpelier and Calais.

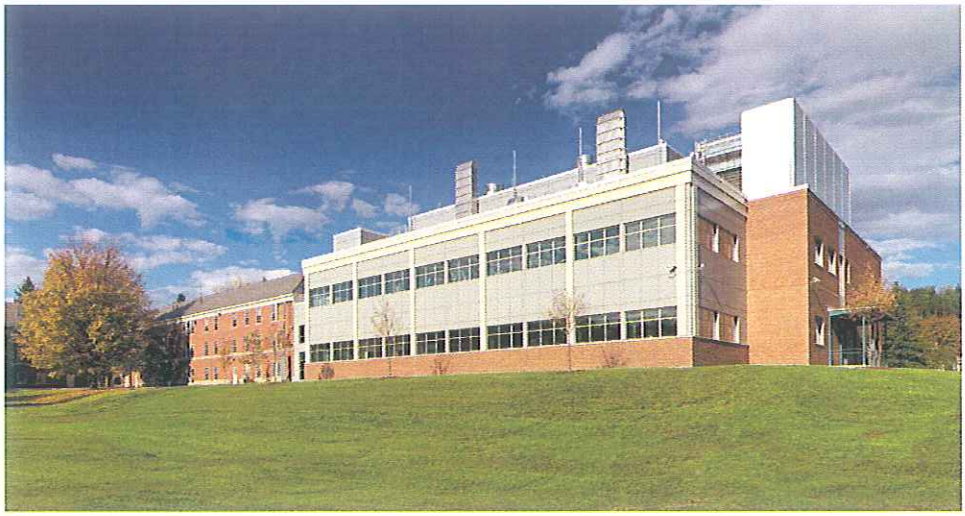
Design Challenges and Solutions:

- Site selection was a significant factor in resolving the program.
- New station was designed with a large training/ community room.
- New site did not have municipal water or sewer which was challenging for utility support for sprinkler coverage.

** Won Efficiency Vermont "Best of the Best" Design Award 2011

State of Vermont Forensics Lab

Waterbury State Office Complex, Waterbury, VT



Project Scope:

The State of Vermont Forensic Laboratory is a new 34,000 sq. ft. facility completed in October 2010. Designed in association with HDR Architecture, the role of Scott + Partners was to design the exterior shell and its connections to both the interior functions and to the existing DPS building. The goal of this project was to design a highly energy efficient thermal shell that also tied into the fabric of the historic Waterbury State Office Complex and represented the forward thinking of the Department of Public Safety.

Awards:

Scott + Partners, Inc. in association with HDR-CUH2A received the Efficiency Vermont 2011 – Honor Award for New Construction, Large Buildings.

PROJECTS

Dealer.com Headquarters, Phase I & II

Burlington, VT

Project Scope:

150,000sf complete renovation of a 1950's era industrial building in downtown Burlington. This project was completed in two phases: Phase I (65,000sf) was complete in 2007 and Phase II in 2011. This project is LEED Silver certified and incorporates several energy efficient measures, and a new exterior shell. The interior design responded to unique program of owner and includes open offices, café, auditorium, and a retractable roof in exercise studio.

Counseling Services of Addison County-Catamount Park

Middlebury, VT

Project Scope:

A new 26,000SF three story office building designed as the new headquarters for Counseling Services of Addison County. It is a wood framed metal roof structure, highly insulated and energy efficient. It is an Energy Star rated building. Site design included parking for 40 cars and stormwater treatment system.

Design Challenges and Solutions:

- This project was designed to create a new and enlivening image for CSAC. The design of entries and circulation was a it provides both private space for their operations and public meeting space that can be used at off hours.
- Design achieved necessary privacy between individual offices and corridors for HIPPA compliance.
- The design provided for easy connection to the exterior for the variety of functions and uses required by CSAC.
- The project was designed to meet a very constrained financial budget and construction schedule.

PROJECTS

Housing Vermont - Richford Main Street Mill Housing

Richford, VT

Project Scope:

Revitalization of an existing 4 story, 40,000sf historic mill building and adaptive reuse for commercial, health care and residential tenants.

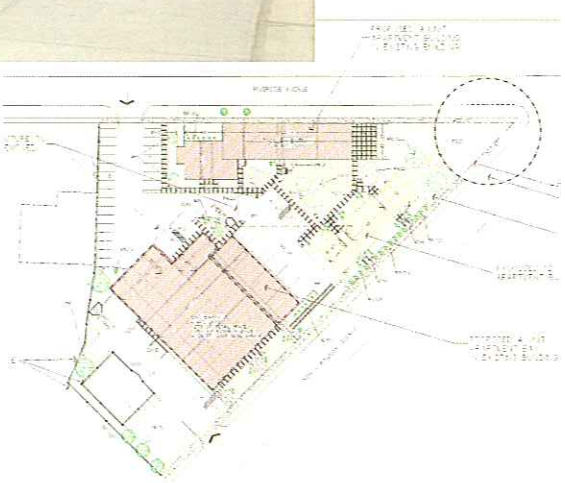
Design Challenges and Solutions:

- Existing historic mill building in VT downtown district
- Multi-tenant use required careful life safety planning and design of exiting
- Integration into streetscape and support of surrounding village fabric
- Challenging site design with grade changes and limited street access

PROJECTS

BUS BARNS

Burlington, VT



Project Scope:

This mixed use project in the historic Old North End completely renovated two historic trolley and bus barns to include 25 units of affordable housing and 15,000sf of commercial lease space and constructed a new 12 unit apartment building

Design Challenges and Solutions:

- Conversion of trolley and bus maintenance garages to new affordable housing within the restrictions of historic preservation standards
- Design of a new 3 part, 12 unit apartment building to fit within the existing context
- Design new fenestration systems to work within both REEP and NPS historic preservation standards
- Provide five ADA compliant housing units and full accessibility to all commercial spaces.

PROJECTS

Hall Block Renovation Project, 210 College Street

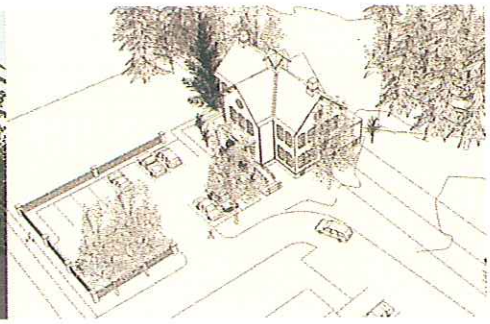
Project Scope:
Complete renovation of all five floors (25,300 s.f.) and exterior of an historic commercial building in the downtown area. All work included compliance with the National Park Service Historic Preservation Standards (Burlington, VT.)

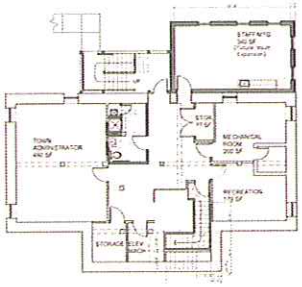
Design Challenges and Solutions:

- *The original building appearance was researched and the facade was brought back to match the original appearance in order to comply with the National Park Service Historic Preservation Standards*
- *Integrated new energy efficient MEP, sprinkler and telecom systems into existing infrastructure*
- *All work completed in a phased manner in order to maximize leasable space*
- *The building was brought into compliance with current life safety and accessibility codes*
- *Received the 2003 Preservation Trust Award, from the Preservation Trust of Vermont*

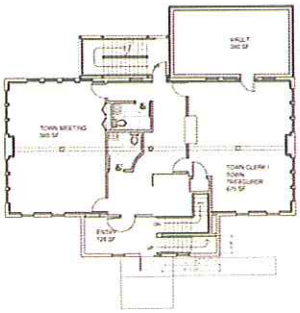
Jericho Town Hall Addition & Renovation

Jericho, VT

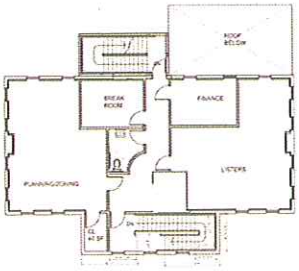




BASEMENT LEVEL RENO PLAN



FIRST FLOOR RENO PLAN



SECOND FLOOR RENO PLAN

Project Scope:

A 6,445sf design for 20 year planned expansion of municipal offices. Includes renovation of existing 2-story historic building and new addition to accommodate increased program.

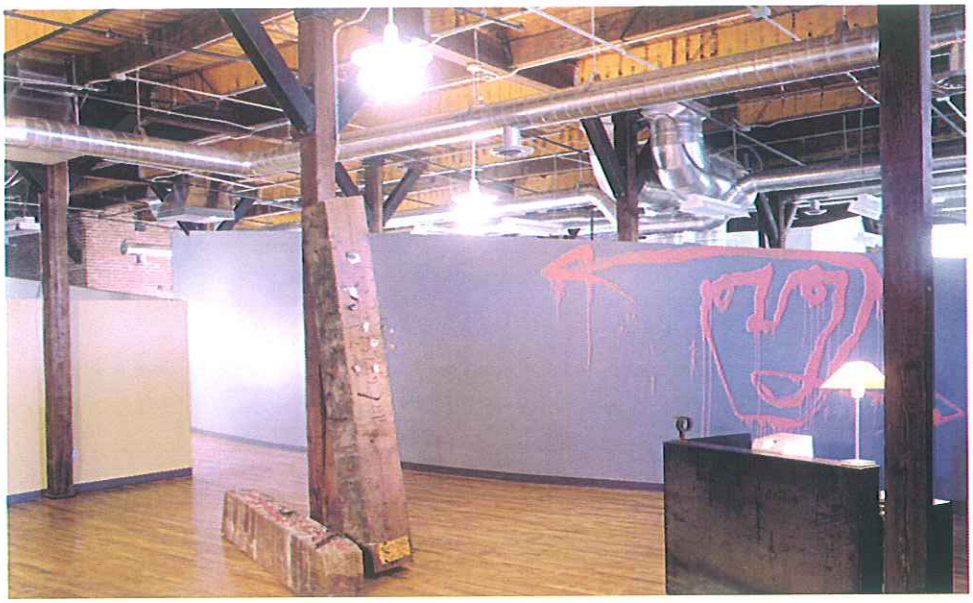
Design Challenges and Solutions:

- *Existing second story reclaimed after 15 years. New plans include two new stairs and an elevator.*
- *6 hour records vault increased from 100sf to 350sf; state of the art fire protection*
- *Site constraints restrict addition to rear only*
- *Complete reworking of site plan to provide additional parking, entry.*

PROJECTS

Jager DiPaolo Kemp Design Office Building

Burlington, VT



Project Scope:

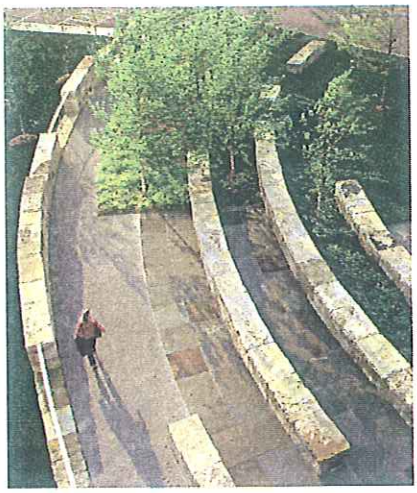
Complete renovation of an old 44,000sf masonry warehouse for office and studios for a marketing design firm, art gallery and leased office space

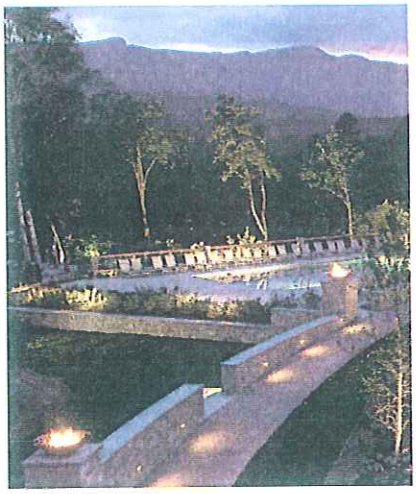
Design Challenges and Solutions:

- Create strong contrasting design within existing masonry and wood structure
- Maintain sense of openness in studios
- Integrate new HVAC and electrical systems with existing building
- Design for expansion and flexibility within studio and support areas

H. KEITH WAGNER | PARTNERSHIP

PROFILE





H. Keith Wagner Partnership is a nine person, professional Landscape Architecture and planning partnership founded in 1987. Our firm offers expertise and services for Landscape Architecture, land use, site planning and urban planning. The process of uniting context, form and materials provides the basis for H. Keith Wagner Partnership's approach, crafting modern sculptural landscapes expressing the essential inherent beauty of natural materials.

The firm's partners, H. Keith Wagner FASLA and Jeffrey Hodgson ASLA, lead the studio's commitment to excellence in design and respect for the diversity of our client's needs and project settings. The partners and staff contribute a vigorous knowledge of landscape architecture, construction and a conscientious execution and delivery of projects. Structured in the tradition of the open design studio, H. Keith Wagner Partnership encourages and fosters interaction and collaboration throughout the design process. This collaborative environment cultivates a philosophy for shared commitment to creative application of design, technology, and social responsibility in the making of new landscapes.

Our reputation comes from designing modern, sustainable environments in a wide variety of institutional, campus, corporate, residential, resort and urban design, and planning projects. Geographically, these projects range from New England and Canada to Hawaii and the Bahamas.

H. Keith Wagner FASLA, the firm's founder, is a licensed Landscape Architect in Maine, New York, Maryland, Massachusetts, Rhode Island & Vermont. He is also registered with the Council of Landscape Architectural Registration Board (CLARB) and a Fellow of the American Society of Landscape Architects and participates in the local Vermont Chapter of ASLA. In addition to the practice, Keith has lectured extensively at major universities and symposia including Harvard - GSD, Syracuse University-ESF, RISD, University of Vermont, Radcliffe, the Smithsonian Institute and Cornell University.

Jeff Hodgson ASLA, partner since 2006, is a licensed Landscape Architect in Connecticut, New Hampshire, New Jersey, Ohio & Vermont. Jeff is registered with the Council of Landscape Architectural Registration Board (CLARB), is a member of the American Society of Landscape Architects, is a former President of the Vermont Chapter of the American Society of Landscape Architects and is a member of the Vermont Green Building Network.

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JEFFREY HODGSON
ASLA Partner

Jeff Hodgson has collaborated with H. Keith Wagner since 2003, bringing his extensive experience in all phases of landscape architectural project development to the partnership. Jeff received his Bachelor of Landscape Architecture degree from the College of Architecture and Design at Kansas State University in 1986. Since that time he has practiced in a number of outstanding design firms including Johnson, Johnson & Roy, Inc., Ann Arbor MI and Hargreaves Associates, San Francisco CA. Jeff has recently completed two large college housing projects for the Massachusetts State College Building Authority where he has successfully created spaces that balance aesthetics, programmatic issues and environmental concerns. Experienced with Low Impact Development (LID) Techniques, Jeff has been able to create site designs that reduce the impact of new development and educate the public on the benefits of these pratcices. Jeff has been a visiting professor at Miami University, Oxford OH, is a frequent design juror at University of Massachusetts Amherst and has received awards for his design work from the American Institute of Architects and the American Society of Landscape Architects. He is a Past-President of the Vermont Chapter of the American Society of Landscape Architects.

Institutional Experience

Currier Street Mixed-use Development
Hanover, New Hampshire

South Block Mixed-use Development
Hanover, New Hampshire

University of Vermont, 438 College Street Renovation
Burlington, Vermont

University of Vermont, Dudley H. Davis Student Center, LEED Gold Certification
Burlington, Vermont

Salem State University New Residence Halls - LEED Gold Certification Pending
Salem, Massachusetts

Bridgewater State University New Residence Halls - LEED Silver Certification
Bridgewater, Massachusetts

Education

Kansas State University
College of Architecture & Design
Bachelor of Landscape
Architecture, 1986

University of Tulsa
College of Business Administration
1980 –1982

Washington University
College of Architecture
1982

Professional Experience

H. Keith Wagner Partnership
Burlington, VT
Partner
2006-Present

Wagner McCann Studio
Burlington, VT
Senior Associate
2003 - 2006

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Beckwith Chapman Associates
Oxford, OH
Associate
1997 - 2003

Patricia O'Brien LA
San Francisco, CA
Project Designer
1994 - 1996

Hargeaves Associates
San Francisco, CA
Senior Landscape Architect
1990 - 1994

Johnson, Johnson and Roy, Inc.
Ann Arbor, MI
Senior Landscape Architect
1986 - 1989

Academia / Presentations

Guest Instructor / Design Juror, *University of Massachusetts Amherst 2010*
"Heritage Aviation - A Case Study", Low Impact Dev. Conference - *Burlington 2010*
"The Emergence of Modernism in Landscape Architecture", *Adult Continuing Education, South Burlington 2009*
"Current Trends in Landscape Architecture" - *AIA Vermont, Burlington City Hall 2007*
"Modernism in Landscape Architecture", *Miami University Art Museum 2000*
Instructor, Depart of Architecture - *Miami University Fall 1997*

Affiliations

Member, ASLA - *American Society of Landscape Architects*
Past-President, *Vermont Chapter - American Society of Landscape Architects*
Member, *Vermont Green Building Network*
Committee Member, *Art In Public Places Committee - Burlington City Arts*

Awards - Publications

2011	Jury's Award of Excellence Award, - Vermont Chapter, ASLA - Marsh Hall Salem State University
2011	Honor Award - Vermont Chapter, ASLA - Heritage Aviation Campus
2011	Honor Award, Boston Chapter, ASLA - Marsh Hall Salem State University
2011	Winning Submission, Rhode Island State Council on the Arts, URI Medicinal & Wellness Garden
2011	Public Open Space Award, - Vermont Chapter, ASLA - Fletcher Allen Radiology
2011	International New landscape, issue No.1, Vermont Pool & Poolhouse
2010	Merit Award – Boston Chapter, ASLA: North Cove Residence
2008	International New Landscape - Issue No.6, Crimson Hall – Bridgewater State College
2007	Jury's Award of Excellence – Vermont Chapter, ASLA: Topnotch Resort & Spa
2006	Beautiful Homes - Winter Issue, Jeffersonville VT Residence
2004	Honorable Mention - VT. Public Spaces Award, Winooski Downtown
2004	Landscape Architecture Magazine, Details Column, March, Band Of Light
2004	Landscape Architecture Magazine, Details Column, January, Right Off The Farm
2003	Design Honor Award - Ohio Chater ASLA, – Life Enhancing Gardens, Lifesphere, Cincinnati OH
2002	AIA Cincinnati Design Awards, Landscape Honor Award- Life Enhancing Gardens, Lifesphere, Cincinnati OH
2002	"Life Enhancing Gardens" Tasarim Magazine, Issue 124
1998	Design Honor Award - National American Society of Landscape Architects, Hargreaves Associates - Confluence Park, San Jose CA
1998	Design Honor Award - National American Society of Landscape Architects, Hargreaves Associates - Guadalupe River Park, San Jose CA
1998	Design Honor Award -National American Society of Landscape Architects, Hargreaves Associates – Library Square, University of Cincinnati, Cincinnati OH

Licenses

State of Connecticut
State of New Hampshire
State of New Jersey
State of Ohio
State of Vermont

CLARB Certified

AMY HOUGHTON
Landscape Architect

Amy Houghton has recently joined the H. Keith Wagner Partnership, after working as a landscape architect and project manager for seven years with Sasaki Associates in Boston. Prior to Sasaki, and to receiving her Masters of Landscape Architecture at the University of Oregon in 2005, Amy worked as a civil engineer and stream restoration specialist in the Pacific Northwest and California in the mid 1990's. During this time, she developed a strong natural resource and stormwater management foundation which drives her landscape practice today. Amy's project work at Sasaki reiterates this integration, as seen with several urban waterfront, mixed-use developments and open space planning and design projects, including Watertown Riverfront Park Restoration in Watertown Massachusetts, Portside at Pier One Redevelopment in East Boston, Massachusetts and the Mayeux Ranch Landscape Plan, just south of Baton Rouge, Louisiana. Her involvement in other project types includes site designs for residential communities, public parks and plazas, multi-use trail systems and playgrounds. Amy has received professional awards for her design work from the Boston Society of Landscape Architects (BSLA) and American Institute of Architects (AIA).

Previous Experience

Portside at Pier One Redevelopment
Boston, Massachusetts

Watertown Riverfront Park Restoration
Watertown, Massachusetts

Fort Ticonderoga Garrison Grounds Master Plan
Fort Ticonderoga, New York

Mayeux Ranch Landscape Plan
St. Gabriel, Louisiana

Quarterpath at Williamsburg Open Space Plan
Williamsburg, VA

Queen's University, The Queen's Centre
Kingston, Ontario

St. James Community Redevelopment
Cambridge, Massachusetts

Education

University of Oregon
Masters of Landscape Architecture, 2005

Bachelor of Landscape Architecture, 2002

Lafayette College
Bachelor of Science, Civil Engineering, 1990

Professional Experience

H. Keith Wagner Partnership
Burlington, VT
Landscape Architect
2010 - Present

Sasaki Associates
Watertown, MA
Senior Landscape Architect
2002 - 2010

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United States Forest Service
Bishop, CA & MT
Restoration Specialist
1997-1998

City of Lake Forest Park
Lake Forest Park, WA
Civil Engineer Consultant
1994-1996

SVR Design Company
Seattle, WA
Design Engineer
1992-1996

Awards	2008	Honor Award - BSLA Planning & Analysis: Sasaki Associates - Fort Ticonderoga Garrison Grounds Master Plan
	2005	AIA Award: Sasaki Associates - Texas A&M Master Plan,
Affiliations	*2009*	*Charles River Watershed Association - committee member*
	2009	*Appalachian Mountain Club - committee memeber*
Publications	2008	Sasaki, GreenNEWS, " Mayeux Ranch Master Plan - A Mixed Use Community on the Bayou", Winter, 2008.
Licenses		State of Connecticut #1105

REPRESENTATIVE HISTORIC LANDSCAPES

FAIRHOLT ESTATE, Burlington VT

The publisher Henry Holt built this Georgian Revival style mansion as a summer home in the late 1890's. Our challenge was to update the property for the client, while respecting the original construct and character established by renowned landscape architect Frederick Law Olmsted. Our research into the history, including correspondence between Holt and Olmsted, lead us to the original planting plan allowing us to utilize the same species where applicable.

OFFICER'S ROW / FORT ETHAN ALLEN, Colchester VT

The Colonial Revival style houses that make up Officer's Row in Fort Ethan Allen were once used to house commissioned officers in the Fort. They stand in the front of Fort Ethan Allen looking out over the Parade Grounds. As part of the conversion of these structures to condominiums, a master landscape plan was created. Old photos and documents were researched in order to bring back some of the original plant species and incorporate them into a cohesive overall plan.

THE WOODSTOCK INN, Woodstock VT

A landscape masterplan revitalized and modernized the Vermont landmark into a luxury inn and spa surrounded by six acres of intimate courtyards, sculpture, fountains, heated pool and gardens. The plan removed autos from the site, preserved historic specimen trees and flagstone paving and created elaborate English gardens, including an herb garden for the chef at the resort's restaurant.

438 COLLEGE STREET / UNIVERSITY OF VERMONT, Burlington VT

This historic Burlington property was renovated to house the administative offices for the College of Arts and Sciences. HKW-P worked closely with the design team to organize site components including a terrace, parking, sidewalks and handicap access. Walks were scaled to be appropriate for the residential character of architecture and the planting scheme included old time favorites in addition to more modern cultivars. Trees were placed to provide afternoon shade for parking areas. Some site relics were allowed to remain to remind visitors of the house's long history.

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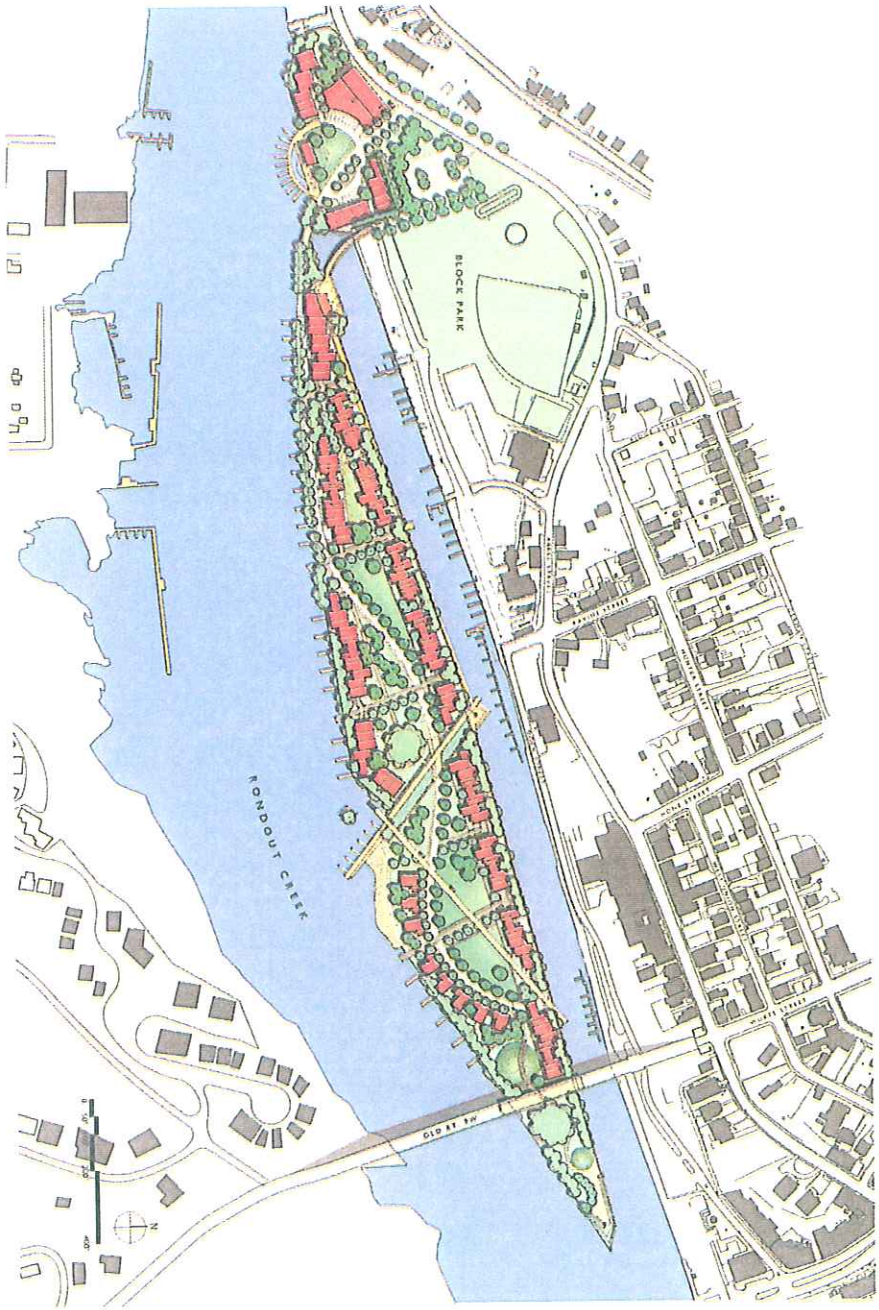
ISLAND DOCK
Kingston, New York

Conceptual Master Plan -
Option 1

H. Keith Wagner Partnership created a Master Plan for the brownfield conversion of a 20-acre man-made island within a Hudson River tributary to be converted into an innovative mixed-use and residential waterfront community and passive public park. Key components of the Master Plan are a continuous public promenade along one mile of the inner channel integrated with new residences and commercial space. A new public waterfront park is envisioned at the tip of the island affording stunning views of the Hudson River and the Historic Waterfront District of Kingston.



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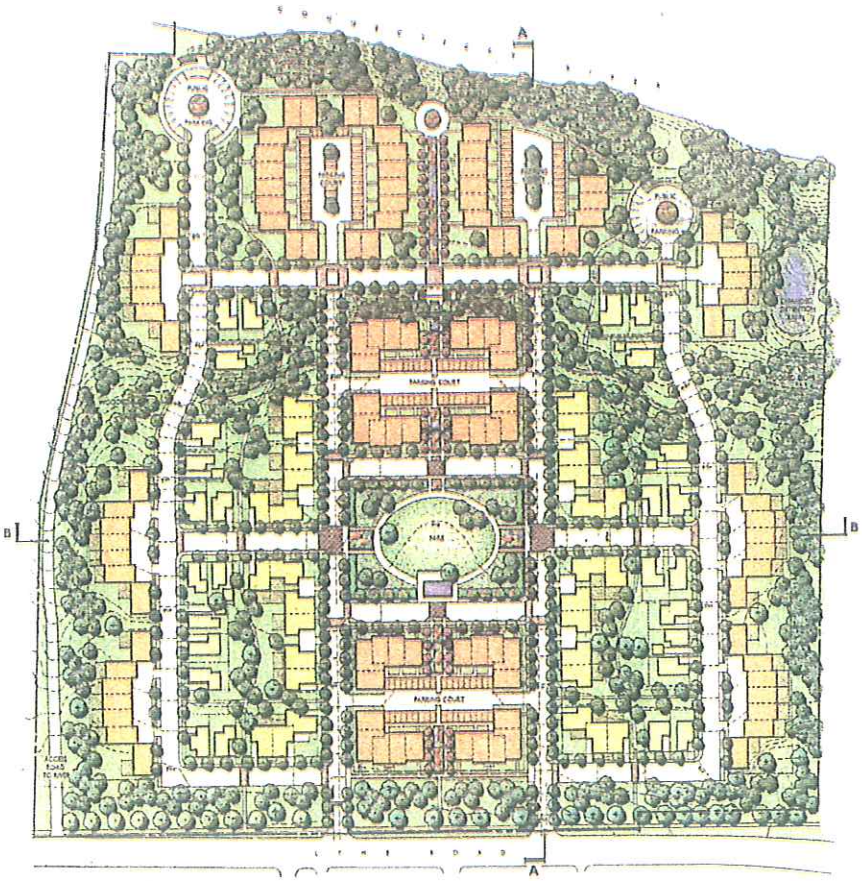
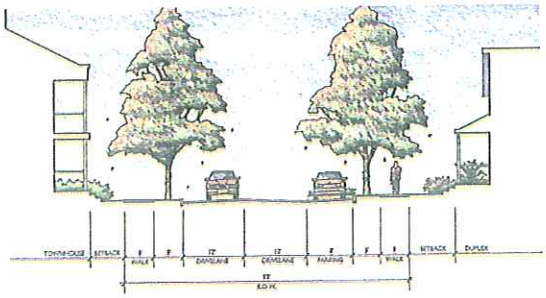
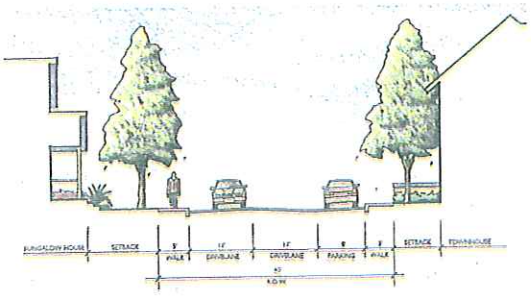
RIVERCREST HOUSING
Dartmouth College
Hanover, New Hampshire

Master Plan

H. Keith Wagner Partnership devised a Master Plan for new faculty and graduate student housing on a 38 acre parcel with existing student housing. The Rivercrest Housing Project responds to Dartmouth College's desire to provide an innovative approach to a phased residential development for faculty, staff and graduate residences. The project incorporates "New Urbanist" principles for a unique, sustainable approach to residential community planning that provides a sense of place, uses land efficiently without compromising livability, and that satisfies the high quality market criteria as well as the city and state approvals process.







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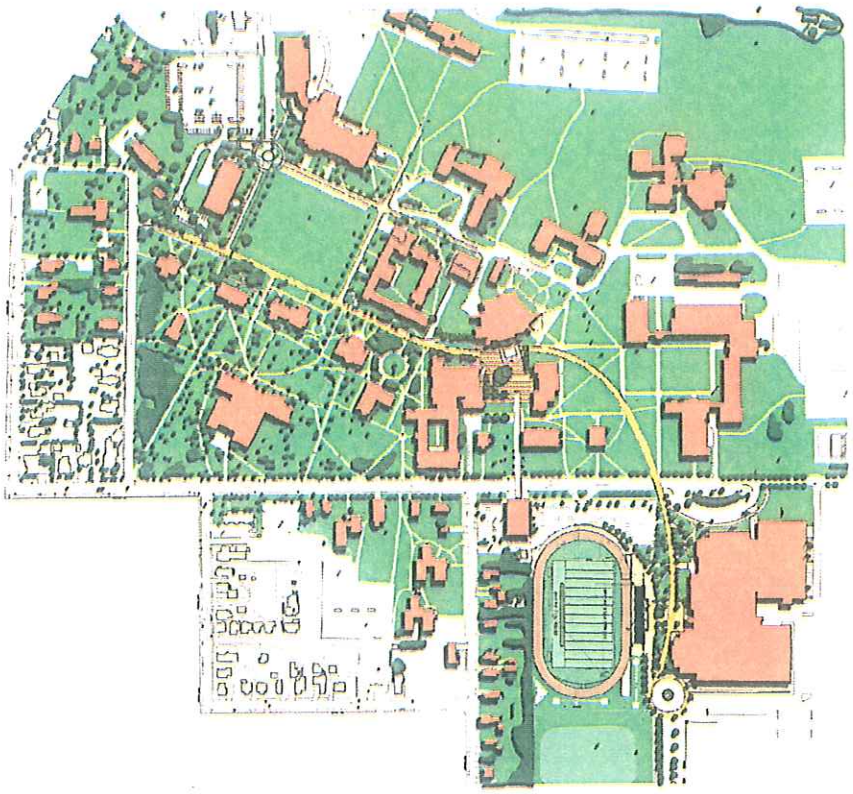
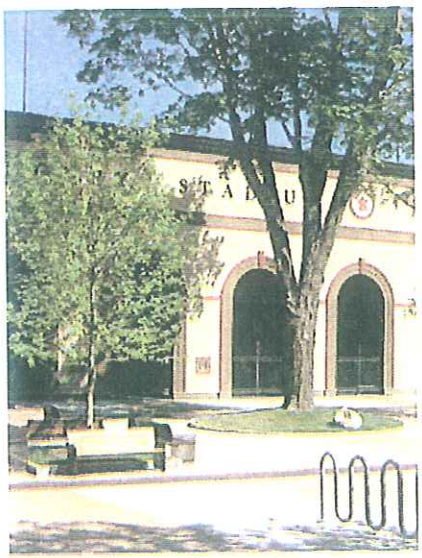
CAMPUS MASTER PLAN
& MEMORIAL WALK
St. Lawrence University
Canton, New York

As a part of the campus master plan project, vehicular circulation is going to be removed from the center of campus and replaced with more traditional pedestrian quadrangles. This study takes a closer look at the historic North Quadrangle which is bordered by Vilas Hall, Gunnisun Memorial Chapel, Gulick Theater and Dean-Eaton Hall. Plans for the quadrangle include removal of the existing roadway, creation of a ceremonial drop-off, re-grading of the quadrangle to create an amphitheater for special events such as orientation and the development of an outdoor geology classroom which will expose the natural rock outcroppings present on site. Plantings are designed to frame views and highlight entrances to the buildings surrounding the quad.

Memorial Walk is a pedestrian ribbon linking the main academic campus with the athletic campus. The gentle arch of the walk contrasts with the traditional rectilinear geometry of the campus, providing an ideal park setting with mature trees and substantial new planting. Leigh Street was removed from the center of the athletic campus to accommodate the Memorial Walk and create a pedestrian corridor and stadium plaza





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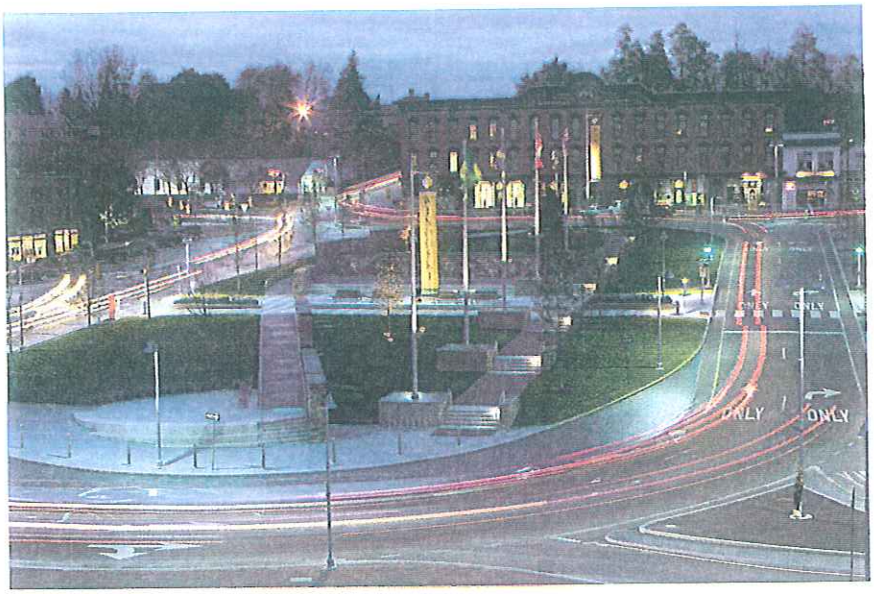
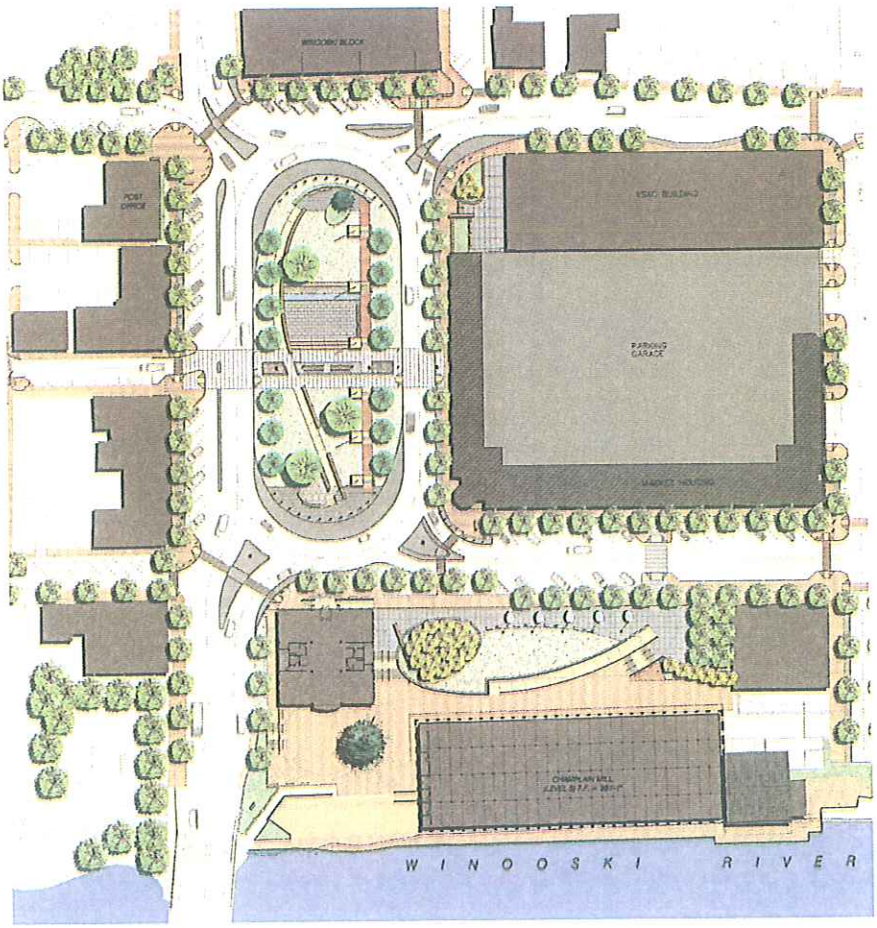
WINOOSKI DOWNTOWN DEVELOPMENT MASTER PLAN

Winooski, Vermont

The Winooski Downtown Redevelopment Project is an ambitious $175 Million Dollar project to revitalize downtown Winooski. HKWP worked closely with the design team to develop a Master Plan as well as site designs for a series of prominent open spaces and streetscapes. The planning and design goals were to restructure and revitalize the existing fragmented elements of the central business district knitting them together with a compliment of new commercial/ retail facilities, high density housing, and a 1200-car parking structure within a re-engineered traffic pattern. Two prominent open spaces are created - a centrally located public park and a civic plaza flanking the Historic Champlain Mill to the Winooski River.

The project received a 2006 Smart Growth Award from the Vermont Forum on Sprawl.





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SUZANNE JAMELE

HISTORIC PRESERVATION CONSULTING

Suzanne Jamele

Historic Preservation Consulting
1 High Street
Plainfield, Vermont 05667
802-454-7825 phone 802-454-7780 fax scjamele@gmail.com

Background/Description of Firm

Suzanne C. Jamele, Historic Preservation Consultant, is a sole proprietorship that provides historic preservation services for public and private clients. She brings eighteen years experience working at the Vermont Division for Historic Preservation (VDHP) (also known as the State Historic Preservation Office-SHPO); as Environmental Review Coordinator and principal structures review staff for state and federally funded and permitted projects, as well as Survey and State and National Register Coordinator. A familiarity of expectations, as well as skills and relationships, developed at the SHPO office will facilitate projects. Services include preparation of materials for listing on the State and National Registers of Historic Places, historic sites and structures survey, project reviews under state and federal laws including Acts 248 and 250, 22VSA14- the Vermont Historic Preservation Act, and Section 106 of the National Historic Preservation Act.

Primary Contact

Suzanne Jamele
1 High Street
Plainfield, Vermont 05667

802-454-7825-phone
802-454-7780-fax
scjamele@gmail.com

Statement of Qualifications

Suzanne Jamele holds a Master's of Science in Historic Preservation from the University of Vermont. Until October 2008 she worked at the Vermont Division for Historic Preservation (VDHP), for ten years as the Environmental Review Coordinator and structures review expert, and for eight years as Survey and State and National Register of Historic Places Specialist. She served on the Vermont Inter-Agency Act 250 Review Committee for ten years. She has conducted numerous workshop sessions on the process of Section 106 review and worked with communities, organizations and individuals to identify and list properties on the State and National Registers. She has provided training to historic preservation consultants regarding survey methodology and State and National Register evaluation and documentation standards. She has been an instructor in the University of Vermont historic preservation masters program and worked with students on internships related to survey and preparation of National Register nominations. Since leaving the Division she has operated a consulting business focusing on preservation planning, survey, preparation of Register nominations and RITC tax credit forms, and project review under state and federal law. She is active in her community, particularly focusing on the reuse of historic community buildings and expanding public knowledge of local history.

For 10 years Ms. Jamele was the Environmental Review Coordinator for the Division for Historic Preservation and coordinated both archeological and historic structures reviews under state and federal law for many types of projects. Work included identification of historic structures within the project area, assessment of the effect of the proposed project on the historic

resource(s), and discussion of alternatives or mitigation if necessary. This involved participation in numerous reviews of proposed rehab projects for many types of structures to insure compliance with *The Secretary of the Interior's Standards for Rehabilitation.* In addition, the eight years experience as statewide State and National Register Coordinator provided a strong background in determining the eligibility of resources within project areas. This position was responsible for processing all Vermont National Register of Historic Places nominations. The 18 years in state government resulted in a familiarity with government processes and practices, along with the development of strong working relationships with staff at state and federal agencies.

The consultant has not had a contract terminated in the last five years and has not been assessed any penalties under any existing or past contracts. The consultant has not been the subject of any order, judgment, or decree suspension or otherwise limiting the right of the consultant to engage in any business, practice or activity. The consultant is not involved in any pending or threatened litigation, administrative or regulatory proceedings.

Recent and Relevant Project Experience

The practice is varied and has included numerous multi-family housing renovation projects as well as review of energy efficiency efforts undertaken by housing organizations, communities, nonprofits and private individuals.

- Many of these projects have used the historic preservation Rehabilitation Investment Tax Credit including a number of apartment buildings in Burlington and Winooski currently being rehabbed through the City Neighborhoods Project. Sue Cobb, Housing Vermont, 123 St. Paul Street, Burlington, VT 05401.

- Coordination with Scott & Partners Architects and the Barre Housing Authority on renovations, particularly window replacement, at the Washington Apartments, a brick building that contains senior housing in downtown Barre. Chip Castle, Barre Housing Authority, 4 Humbert Street, Barre, VT 05641.

- Review of proposed deep energy efficiency upgrades and installation of solar hot water panels in multi-family housing units owned by nonprofit housing organizations in Central and Northern Vermont. Bob Hansen, Gilman Housing Trust, 48 Elm Street, P.O. Box 259, Lyndonville, VT 05851.

- Presenter at a workshop in 2010 for applicants for ARRA energy efficiency grant funds which provided an overview of historic preservation considerations. Review of a number of projects undertaken by individuals, communities, and organizations, including those coordinated by the Windham Regional Commission, using ARRA energy efficiency funds to make weatherization improvements to their buildings. Kate McCarthy, Windham Regional Commission, 139 Main St., Suite 505, Brattleboro, Vermont 05301.

- Evaluation of a number of solar energy installations on private residences for several firms, gro-Solar, Vermont Solar Engineering, and Independent Power. David Palumbo Independent Power LLC, 462 Solar Way Drive, Hyde Park, VT 05655.

- Currently on contract to conduct reviews of proposed energy efficiency undertakings by individuals and organizations funded by the Vermont Energy Efficiency Program administered by the Central Vermont Community Action Council. Andrew Flagg, CVCAC/VFEP, 195 US Rt. 302, Berlin, VT 05641

- Consultation with Goddard College on plans for rehabilitation and installation of energy related upgrades for a number of historic buildings on the former gentleman farm campus, which is listed on the National Register; as well as to develop a design for a new bio-mass heating facility on campus. Katherine Cole, Goddard College, 123 Pitkin Road, Plainfield, VT 05667.

Waterbury Complex Project Approach

The Waterbury Complex is listed on the National Register of Historic Places as a contributing resource in the Waterbury Village Historic District. The role of the architectural historian will be to coordinate with the project team to ensure the proposed plan for reusing the Complex will take into consideration effects of the various project components on the historic buildings at the Complex, as well as the Complex as a whole. It will also take into consideration any effect the proposed actions will have on the historic village, of which the Complex is a critical component. The architectural historian will ensure that the proposed plan complies with the Vermont Historic Preservation Act,

In coordination with the project team, each building at the complex will be visited and assessed for potential continued use as well as for its historic significance. Since the National Register nomination was prepared in 1976, some buildings may be considered historic that were not at that time, having passed the critical 50 year age mark. Others may no longer be significant due to substantial alteration. Existing conditions reports will be reviewed and taken into consideration.

The team will evaluate the most feasible approach to developing a campus that will retain as many state offices as possible. This is likely to require removal of some buildings and construction of one or more new buildings with related landscaping, parking, utilities, etc. The architectural historian will work with the architects to identify those buildings that may be expendable in order to allow retention of the most historic and visible buildings in the complex. Factors to be taken into consideration are age, condition, location, potential for compatible new construction, potential for any new buildings to provide future flood protection for the historic buildings that would stand to their east. Ideally the new plan would retain at least one building from each general period of growth at the Complex, preserving a visual record of the complex's history. Historic buildings that are retained will be renovated following the *Secretary for the Interior's Standards for Rehabilitation* in order to protect significant interior and exterior features while incorporating energy efficiency and flood proofing measures.

Any proposals for new construction will be evaluated to ensure they are compatible with the surrounding historic buildings in terms of size, scale, materials, design, and orientation.

Coordination with the Vermont Division for Historic Preservation and the Preservation Trust of Vermont will be conducted as necessary.

SUZANNE C. JAMELE

1 High Street, Plainfield, Vermont 05667

scjamele@gmail.com 802-454-7825

EDUCATION

M.S. Historic Preservation, University of Vermont, Burlington, VT,1990

B.A., Anthropology and Canadian Area Studies, University of Vermont, Burlington, VT, 1978

EMPLOYMENT

Historic Preservation Consultant, Plainfield, Vermont, November 2008- present.
Services include State and Federal regulatory reviews, National Register nomination preparation, cultural resource surveys, building histories and photo documentation, preservation planning, and Rehabilitation Investment Tax Credit applications.

National Register Specialist, Vermont Division for Historic Preservation, Montpelier, VT. January 2001-October 2008.
Worked with state and federal agencies, communities, organizations, private individuals, State Historic Preservation Review Board, and preservation consultants to coordinate National Register nomination preparation, review, and submittal to the National Park Service for the State of Vermont. Coordinated similar efforts related to survey and State Register listing in Vermont. Taught classes for the University of Vermont Graduate Historic Preservation Program and supervised individual graduate students and interns on projects related to the National and State Registers.

University of Vermont Visiting Lecturer, Spring 2006 and Fall 2010. In 2005, taught five week graduate student class in the Historic Preservation Program's "Historic Preservation Practice Methods Seminar" HP 305. Sessions focused on preparing National Register of Historic Places nominations. In 2010, taught Fall semester course, HP 302 "Seminar in Historic Preservation Advocacy".

Environmental Review Coordinator, Vermont Division for Historic Preservation, Montpelier, VT. January 1990- January 2001.
Coordinated all project review activities for the Division. Reviewed federal, state, local and private development projects to assess impacts to historic, architectural and archeological properties. Prepared official comments on projects to ensure compliance with Section 106 of the National Historic Preservation Act, 22VSA14-the Vermont State Historic Preservation Act, and Criterion 8 of Act 250. Consulted with project developers, planners, community officials, state and federal agencies, and property owners regarding proposed plans. Prepared letters, memoranda of agreement and other documents with project-specific stipulations. Served on the State Act 250 Interagency Review Committee which evaluates all development applications in VT. Led training and educational sessions at conferences and workshops on various aspects of the historic preservation review process.

PUBLICATIONS

Plainfield, Vermont Historical Society Annual Calendar, 2005-2012.
Co-producer of annual calendar featuring historic images of Plainfield.
Selected images and prepared captions. Coordinated marketing and distribution.

The Town of Plainfield, Vermont-A Pictorial History 1870-1940. May 1993.
Co-editor of book produced by the Plainfield Historical Society. Helped select photos, organized and edited text, and wrote chapter on transportation.

A Walking Tour of Historic Plainfield Village. August 1992.
Prepared a brochure for general use based on the Village's National Register nomination.

Vulnerable Vermont: A Study of Changes to Historic Buildings in Three Vermont Communities, March 1990. Co-producer of report and accompanying poster analyzing the pace of change to historic buildings in Vermont. Sponsored by the VT Division for Historic Preservation and the University of Vermont Graduate Program in Historic Preservation.

Project Prepare: Planning and Historic Preservation in the Mad River Valley, Vermont, Fall 1989. An analysis of historic preservation efforts and growth management tools used in a rural regional planning district. Sponsored by the National Trust for Historic Preservation-Northeast Regional Office.

NATIONAL REGISTER NOMINATIONS PREPARED

Jericho Village Historic District, Jericho, VT

Mad River Valley Historic District, Fayston, Moretown, and Waitsfield, VT

Agricultural Resources of Vermont Multiple Property Documentation Form, Farmstead Property Type. Statewide application.

Braintree School, Pawlet, VT

North Calais Village Historic District, Calais, VT

Cicero Goddard Peck House, Hinesburg, VT

Ai J. White Duplex, Newport, VT

LeClair Avenue Historic District, Winooski, VT

Dumas Tenements, Winooski, VT

PRESENTATIONS

What Does it Mean to be Listed on the National Register? Various community-wide presentations in towns around Vermont considering listing a local district on the National Register, 2001-2008.

The National Register-Current Practices and Issues, Montpelier, VT, Spring 2001-2005, 2007, 2008. One day class for the University of Vermont's graduate course Historic Preservation 305 "Historic Preservation Practice Methods". Included introduction to research in the Vermont State Historic Preservation Office's Resource Room.

Historic Sites and Structures Survey- A Field Practicum, South Hero, VT, April 2001-2005, 2007, 2008. One day class for the University of Vermont's graduate course Historic Preservation 305 "Historic Preservation Practice Methods". Introduction to survey methodology in rural communities.

How to Research Your Historic Barn, Woodbury and Richmond, VT, 2007.
Guidance on useful background research for conducting historic barn surveys given to

the Woodbury Historical Society and the Vermont Youth Conservation Corps in preparation for upcoming survey projects.

An Architectural View of the Growth and Development of Burlington's Old North End, Burlington, VT, November 2006. Illustrated public presentation of the architectural styles and settlement patterns of the Old North End prior to listing various streets on the State Register of Historic Places.

Camp Billings Centennial Celebration, Fairlee, VT, July 2006. Presentation at the camp to campers and alumni to celebrate the camp's 100th anniversary and its listing on the National Register.

Historic Images of Plainfield, Plainfield, VT, February 2005. Slide presentation of historic views of the community at the Historical Society's annual meeting.

New Approaches to Conducting Historic Sites and Structures Survey in Vermont, Vermont Historic Preservation Annual Conference, Bellows Falls, VT May 2004. Overview of current survey methodology including digital technology.

The National Register of Historic Places- What is it?, Montpelier, VT, October 2003, 2004. Presented to group of professionals visiting from Russia through Project Harmony.

Historic Preservation in the Slate Valley, Castleton, VT, January 2002. Presentation for the Slate Valley Sustainable Regional Development Workshop about historic resources in this region of New York and Vermont.

The Section 106 Process and Cultural Resource Review in the Act 250 Process, 1990-2000. Numerous presentations made at conferences and workshops for engineers, architects, planners, developers, federal, state, and local officials, nonprofit staff, and citizens on identifying cultural resources and assessing effect during project planning in order to comply with state and federal laws.

Windows in Time, Aldrich Public Library Centennial Lecture Series, Barre, VT, presented March 1995. An illustrated lecture on the development of Downtown Barre as seen through its architecture.

Dating Your Historic Home, Plainfield, VT, April 1993. Illustrated lecture focusing on architectural styles and features sponsored by the Plainfield Historic Society

A Walking Tour of Historic Plainfield Village. Plainfield, VT, Old Home Days, August 1992. Led guided tours of the Plainfield Village Historic District, listed on the National Register of Historic Places.

ENGINEERING VENTURES, PC

ENGINEERING VENTURES PC

FIRM OVERVIEW

Engineering Ventures, PC is an experienced, consulting engineering firm operating and licensed in Vermont, New Hampshire, New York and surrounding states. Select, qualified professionals and technicians provide a broad range of civil engineering services with specialties in structural and site engineering, permitting and planning. Serving both private and public clients, Engineering Ventures offers service from the office headquartered in Burlington, Vermont, as well as offices in Lebanon, New Hampshire, and Saratoga Springs, New York.

Engineering Ventures has been incorporated since 1994. Its principals' project and firm ownership history is effectively 30+ years in the Burlington area.

KEY PERSONNEL

David Boehm, P.E., Founder of the firm has 40 years of experience, with degrees in engineering and planning. He has been engaged in consulting engineering in the Burlington area for more than 30 years, with 25 years in private practice. His experience includes project management, engineering for both site and structural projects, and municipal planning. David received the 1983 Young Engineer of the Year award from the Vermont Society of Professional Engineers, as well as the 1990 Vermont Engineer of the Year award, which is selected by all the professional societies within the state. He has served on numerous municipal boards where he held several offices. David has served on the American Society of Civil Engineers, the American Consulting Engineers Council, as the President of the Vermont Society of Professional Engineers, the Vermont AOT Wooden Bridge Advisory Team & Transportation Standards Committee, and has been a member of the National Trust for Historic Preservation. In addition, he has served on the Department Advisory Boards of the University of Vermont and Vermont Technical College, where he has also guest lectured. His teaching credits include Adjunct Professor at UVM, and at Chesapeake College, Maryland.

Robert Neeld, P.E., President, with an engineering degree from the University of Vermont, has 28 years of experience in consulting firms. In a firm of multi-disciplines; civil, structural and permitting, Bob has been integral in making Engineering Ventures one of the most respected structural engineering firms in Vermont. The body of Bob's work encompasses many well known, award winning projects including hospitals, schools and universities, athletic facilities, commercial facilities such as office buildings, museums, ski resorts and heavy timber structures, churches, public buildings, and many unique residences ranging in size up to 25,000sf. Bob's work with historic structures includes having spent time in Mississippi helping out with the aftermath of Hurricane Katrina, and work in Cuba to aid in the historic preservation of churches in that country. Bob has served as the President of the Structural Engineer's Association of Vermont (SEAVT), the Chairman of the Committee to Develop Snow Load Standards for the State of Vermont as well as serving on the development team for the BGS Guidelines, and Chairman for the Town of Williston Historic Preservation Committee. In addition, he is a

member of the American Society of Civil Engineers, the Timber Framer's Guild, and he is an Affiliate Member of the American Institute of Architects.

Peter Gibbs, P.E., Vice President, with a Master of Engineering degree from Rensselaer Polytechnic Institute, has been practicing site/civil engineering for over 28 years in the states of New York and Vermont. Peter received his Bachelor of Science in Ocean Engineering and his Bachelor of Science in Civil Engineering at the Florida Institute of Technology. He previously owned his own firm based in Westport, New York, engaging in site development and municipal engineering projects, and was an owner of an Architect/Engineer/Survey/Materials Testing firm in Plattsburgh, New York. The breadth of his experience encompasses municipal facilities, commercial and residential development, surveying, soil/concrete testing, and collaboration directly with architectural firms. Peter's focus has been on efficient stormwater management designs and effective erosion control measures, with substantial experience in earthwork projects ranging from single family lots to grading and new utility systems on 500+ acre sites. He has training by the Corps of Engineers Freshwater Wetlands Delineation at Rutgers University, and he is a Certified Professional in Erosion Control and Sediment Control. Peter is a member of the Construction Specification Institute and the American Water Works Association.

Kevin P. Worden, P.E., LEED AP, and Vice President, is a graduate of Worcester Polytechnic Institute, with Bachelor of Science degrees in both Civil Engineering and Humanities. He was named the 2001 Vermont Young Engineer of the Year. Kevin is a LEED and Sustainability Specialist at Engineering Ventures, contributing 17 years of experience in permitting, civil and structural engineering design. He takes a holistic and innovative approach to projects, grounded in the fundamentals of engineering. Fostering long lasting connections through project collaboration is important to Kevin. Kevin's recent projects with innovative stormwater systems include Burlington Co-housing (Centennial Brook Watershed), the Champlain College Stormwater Master Plan and the Dartmouth College Life Science Center which will store and reuse roof water. He is a past member of the American Society of Civil Engineers, where he held the positions of Treasurer and President, as well as Tau Beta Pi, the National Engineering Society, and Chi Epsilon, the National Civil Engineering Society. In addition to being LEED Accredited, Kevin is a registered New Hampshire Subsurface System Designer. He is a member of the Burlington Development Review Board and a volunteer at the Flynn Theater.

Russ Miller-Johnson, P.E., Senior Engineer, has over 27 years of progressive experience in sustainable structural engineering design including lead engineer roles in management and execution of projects. He has significant experience in assessments, renovations, rehabilitations, additions, expansions, field inspection, and construction engineering for all types of construction. His work also includes performing quality assurance and peer reviews, as well as client administration. Russ has been involved in sustainable projects throughout his practice. He is currently serving on the American Society of Civil Engineers Structural Engineering Institute's Sustainability Committee. In this capacity, he is working on the "Structural Engineer's Guide to Sustainability", has presented a paper on the use of Fabric Formwork as an Alternative Concrete Construction Technology at the 2009 Structures Congress, and is working on a paper concerning structural detailing for enhanced thermal performance. He is a member of Green Globes, as well as the Vermont Green Building Network. He is leading Engineering Ventures' implementation of Life Cycle Analysis and CO_2 load calculations.

ENGINEERING VENTURES PC

GREEN DESIGN & LEED CERTIFIED PROJECTS

George D. Aiken Hall, University of Vermont, Burlington, VT – Civil and structural engineering services are currently being provided for the renovation and expansion of the Building of Natural Resources. The project includes a green roof system, a 2500sf solarium addition, an ecomachine, and will provide a new face for this prominent building at the entrance to the UVM campus. LEED Platinum Certification.

Dartmouth College Life Sciences Building, Hanover, NH – Civil services were provided for this new 170,000 sf facility with 30 wet labs, offices, conference rooms, theater and amphitheater classrooms, and teaching labs. Services include site layout and grading, campus and municipal based utilities, vehicle circulation and parking, demolition and reuse design, roof water collection and re-use (estimated at 1mil gallons/year), quad infiltration and Rain Garden. LEED Platinum Certification.

Roger H. Perry Hall, Champlain College, Burlington, VT – Civil and structural engineering services were provided for the restoration of this 150 year old, Italianate-style brick building for reuse as the campus Welcome Center. The project included an innovative wetland garden on the lower edge of the property designed to absorb storm water runoff, as well as a Geothermal pump, and has been awarded LEED Platinum.

Putney School Field House, Putney VT – Structural services were provided for a 15,000 sf, multi-purpose field house adjacent to the Dining Hall with a Pedestrian Link. The facility, is a net zero building, which will produce more energy than it consumes. This project received a LEED Platinum Certification.

Dudley H. Davis Student Center, UVM, Burlington, VT – At 186,000 sf, the Davis Center houses a four-story atrium, bookstore, retail & pub/bistro, ballroom, conference and meeting room, offices for the student associations and services, and loading dock, and terraces. This building received LEED Gold Certification and the 2008 ACEC Grand Award for Excellence in Engineering.

AVA Gallery, Lebanon, NH – Civil engineering and permitting services were provided for the additions and renovations to this historic three-story, 36,000 sf, downtown mill building. The stormwater management system includes a subsurface stormwater infiltration gallery. This project achieved LEED Gold Certification.

Terrill Hall, University of Vermont, Burlington, VT - Structural engineering services were provided for studies to minimize or eliminate structural requirements and associated construction costs for; new penthouses, roof top mechanical frames and ducts, masonry repair, new large floor openings for ductwork, load increases for new use, seismic bracing of mechanical equipment and systems, and ceiling system support. Received LEED Gold Certification.

Wind NRG Partners and Addition, LLC, Hinesburg, VT - Design of a 30,000 sf, three story, steel framed, super insulated, manufacturing and office building. A 30,000 sf, energy efficient addition has also recently been completed. This was one of the first manufacturing facilities in the world to receive LEED Gold Certification. This building also received an ACEC Award for Excellence in Engineering.

Gile Hill Housing, Hanover, NH – Structural and civil engineering services are being provided for this mixed-income residential community in the college town of Hanover, NH. The community with a planned 120 residences, 62 of which are now complete, will be the largest LEED for Homes-Certified project in New England and the one of the largest in the United States and Canada.

Seventh Generation, Burlington, VT – Structural engineering services were provided for this 19,000 sf, headquarters for a natural product marketer. Design included a new floor opening, new stair framing and railings, exterior base for a generator, and other structural design. This project was awarded LEED Gold.

Lake & College Building, Burlington, VT - A unique, $12M four-story 80,000 sf mixed use building. Civil work included integration with a street-front waterfront site and an adjacent linear public park at a 40' higher elevation, including vehicular and pedestrian circulation, all utility issues, and both on and off site parking requirements. Received LEED Silver Certification.

Joseph E. Carrigan Wing, Marsh Life Sciences, UVM, Burlington, VT - Civil and structural design were provided for this free standing, steel frame, 12,000 square foot addition. The building features a 2-story glass wall system and an elevated steel structure allowing exterior space below the new building. This project was awarded LEED Silver Certification.

4 Currier Place, Hanover, NH – Civil and structural services were provided for this new 35,000 sf steel framed building. This mixed use facility is three-stories, with a 21 space basement garage, and additional 67 surface parking. Interior core shear walls were used with a steel superstructure to maximize tenant views. This building is the first LEED Certified building outside of the campus in Hanover.

Debevoise Hall, Vermont Law School, South Royalton, VT - Structural and civil services, as well as permitting, were provided for this renovated and expanded campus building, that blends modern energy saving technology with historic restoration. This project was awarded LEED Silver Certification.

Floren Varsity House, Dartmouth College, Hanover, NH - Civil Engineering design services for a new three-story 40,000 sf, varsity athletic building at the historic Dartmouth Memorial Field. Portions of the existing stands were removed for the proposed building, which was integrated into the remaining existing stands. This project received a LEED Silver Certification.

National Life Building, Montpelier, VT – Structural and civil engineering services are being provided for this woodchip boiler addition. Work includes review of the existing parking layout with respect to the proposed delivery truck access as well as drainage and utility coordination, analysis and design of the foundation for the 20 ft. by 60 ft. by 22 ft deep vault, and documentation of existing conditions for the adjacent building.

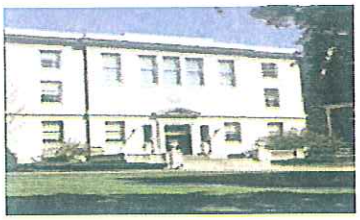
Mt. Anthony Union High School, Bennington, VT – This wood chip facility was constructed with a deep foundation in very porous stratum. A waterproofing foundation was installed with a back up pump system, capable of removing 600 gallons of groundwater per minute.

Mt. Abraham Union High School, Bristol, VT – Civil and structural services were provided for a new wood chip facility, and a 10,275 sf addition to this Addison County high school. Allowance was maintained for the future expansion of a second floor. A new sewer and pavement repair were also performed.

ENGINEERING VENTURES PC

HISTORIC PUBLIC BUILDING PROJECTS

Bennington Downtown State Office Building, Bennington, VT – Civil and structural services were provided for the rehabilitation of this dilapidated two-story building, with unreinforced brick walls. The existing addition was deemed unsalvageable, while the remainder of the building was reinforced with steel and wooden beams. Extra effort was taken in creating an energy efficient edifice, with a geothermal cooling system and drains.



Vermont Supreme Court Building Study, Montpelier, VT – Structural engineering assessment and analyses as part of feasibility study concerning building conversion to use for State Archive facility. Gravity and seismic load work was conducted and included designs to reduce code mandated upgrades. Building is multi-story reinforced concrete superstructure.

Bristol Holley Hall, Bristol, VT – A structural conditions assessment and upgrades were performed on the entire building from the bell tower, roof, overhanging balcony, main floor and foundations. Work to the roof framing included upgrades to the heavy timber trusses and purlins. The main floor was upgraded to meet current Code requirements to hold public events. Three new additions were added to create handicap access to the lower Municipal offices and main level Town Hall.

Akeley Memorial Building Cupola Rehabilitation, Stowe, VT – Structural engineering services are being provided for renovations including a two-story vault addition, entry canopy projects, design of the existing flag pole support, replacement of the existing support columns and anchorage of the cupola to the existing roof structure.

Addison County Sheriff's Office, Middlebury, VT – Renovations were made to this 5,000 sf, 1800's original jail house. An addition was created to provide new office space, a drive through bay for loading and unloading prisoners, and a concrete exterior exercise yard with a steel framed safety enclosure.

Stowe Municipal Building, Stowe, VT – A preliminary structural review was performed on this 1800's building to determine the priorities for immediate structural stabilization and structural code compliance for a renovation project. Recommendations were made for immediate repairs.

ENGINEERING VENTURES PC

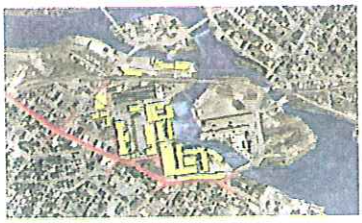
CAMPUS PROJECTS

Environmental and Ag Lab Building Flood Proofing, Waterbury, VT – Civil and structural Design services have been provided for flood protection at this two-story, slab on grade steel frame building at the State of Vermont Office Complex in Waterbury. Additionally, Engineering Ventures has a long-standing history of projects at the State Office Complex and has been involved in evaluation and repair of many buildings damaged by Irene for the Preservation Trust of Vermont and Revitalize Waterbury.

State of Vermont Public Safety Building, Waterbury, VT – Structural engineering services were provided for design of new structural floor support for the UPS equipment, a new exterior mechanical unit concrete pad and entrance/exit slab-on-grade, improvements to roof framing, attic floor framing, and the lateral load resisting system, the chimney removal of the old incinerator and new mechanical floor penetrations in the existing concrete slab.

Goodyear Industrial Park, Town of Windsor, VT - Performed an evaluation and provided environmental services for the buildings, site and campus of the Goodyear Tire and Rubber Company. Developed a building and schematic site plan which depicted the general structural framing and mechanical/electrical systems. Winner of an ACEC Excellence in Engineering award.

Hanover Block Redevelopment, Hanover, NH - Civil and structural engineering services were provided for the complete redevelopment of most of a downtown city block. Services include substantial permit negotiation and a wide array of new and rehabilitated utilities both on site, and off.



Biddeford Mill District Redevelopment, Biddeford, ME – Engineering was provided for a Mill District Masterplan for the re-use of 2 million sf in existing 19th century mill buildings, the redevelopment potential of 20 acres of underutilized parcels, the development of a riverwalk and open space system, an infrastructure plan, a strategy for parking and transit, design and streetscape guidelines and an implementation and funding strategy.

Kimball Union Academy, Meriden, NH – A Facilities Study was performed to review the condition of 30 structures on campus to determine the general condition and code condition. Structural services were provided for additions and renovations to allow the library to move into Miller Commons and for the Student Center to move into the Dining Commons.

ENGINEERING VENTURES PC

FLOOD PLAIN & WATERPROOFING PROJECTS

Burnham Hall, Lincoln, VT – Civil and structural engineering services were provided to remove and replace the existing floor slab to install a collection system to dewater the subgrade throughout the floor area. The work included design of a groundwater collection system immediately adjacent to the existing building, and design of the groundwater pumping system, including floor sumps, a small sump for the pump, and discharge piping to a positive outlet on the outside of the building wall.

Barre Old Labor Hall, Barre, VT – This project includes floodproofing, for wet and dry, in an historic building in Barre. A structural assessment of the interior and exterior conditions, foundation, exterior fire escape, porches, entrances, and exits was performed for remediation. A study is underway to acquire funding for the rehabilitation in zone A for FEMA.

Mt. Anthony Union High School, Bennington, VT – This wood chip facility was constructed with a deep foundation in very porous stratum. A waterproofing foundation was installed with a back up pump system, capable of removing 600 gallons of groundwater per minute.

Freeman Hall, Champlain College, Burlington, VT – This historic multiuse building was experiencing drainage issues at the foundation and under the footings. Civil services provided included proper drainage and free draining backfill.

Staff Development for Educators Warehouse, Peterborough, NH – Civil engineering, foundation design, and permitting services were provided for a 35,000sf addition (15,750sf of which is a future phase), roughly 600' truck access drive plus aprons and loading docks (8), 20 parking spaces adjacent to addition and 43 parking spaces plus drives across street, miscellaneous walks, 100' waterline service connection, adaptation and reuse of existing sewer service line, stormwater conveyance and treatment.

Ham Ice Arena, Conway, NH - Site design and permitting for a 40,000 SF ice skating facility located on 18 acres on the shores of Peaquawket Pond. The parcel included 13 acres of wetlands. The site was flat with a high water table and precluded the use of infiltration or detention basin for storm water treatment. State permits required included the Site Specific Permit for the Department of Environmental Services, which included the Shoreland Protection Act and the Wetlands Permit.

L.N. CONSULTING INC.

L. N. CONSULTING INC.
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FAX: (802) 655-7628

December 2, 2011

Tyler Scott
Scott and Partners Architects
20 Main St.
Essex Junction, VT 05452

Re: Waterbury State Office Complex – Campus Master Plan Project – Mechanical, Electrical, Plumbing, and Fire Protection Consulting and Design Proposal.

Dear Mr. Scott,

Thank you for the opportunity to provide a proposal regarding the Waterbury State Office Complex Campus Master Plan Project. L.N. Consulting is excited about the opportunities to work with Scott and Partners Architects on this particular project as we have much experience in the development of energy efficient office buildings, historic building renovations/expansions, biomass CHP plants, and campus energy distribution. We are also proud of the past projects created from our past collaboration. Our enthusiasm for energy efficient, sustainable, and carbon neutral projects is paramount as we believe that human existence on this planet should conform to cooperation.

Firm Overview
L.N. Consulting is located at 69 Union St. in Winooski, VT. The managers of L.N. Consulting are Wayne Nelson and Paul Lekstutis. The company is established in Vermont and has been in business since 1999. In 2009, L.N. Consulting completed the transition to an employee owned business through the establishment of an ESOP. We are a dedicated and experienced firm staffed with nine full time engineers. L.N. Consulting provides mechanical, plumbing, electrical, and fire protection design and consulting services, and energy master plan consulting services. We provide engineering services for the following industries: sustainable/renewable/energy efficient, university, residential, healthcare, laboratory, educational, historical, commercial, municipal, institutional, pharmaceutical and restaurant.

A majority of our projects encompass sustainable, renewable, and energy efficient design techniques and systems. Our niche is providing highly detailed consulting and design services for complicated projects. We excel in highly energy efficient buildings, laboratories, commercial structures, hospitals, historical renovation/expansion, education facilities, and renewable energy type projects. Our company goals are to provide detailed consulting, master planning, and high end bidding and construction documentation to assist the owner/design team in developing a successful project within budget. We provide vigilant construction administration on all of our projects to ensure quality of materials installation and systems operation. We are very personable engineers with a keen ability to ask good questions and develop creative and diverse solutions. We are very well versed in the construction environment due to our hands on experience in the mechanical and electrical trades. We provide complete master planning, energy consulting/auditing, design, consulting, and commissioning services. When used as energy

efficiency consultants we can provide detailed reviews of campus energy use, distribution and production systems, including renewable power generation systems.

We have experience with multiple geothermal and radiant heating/cooling technologies, solar thermal technologies, PV technologies, fuel cell technologies, and can provide insight into the most energy efficient and cost effective technologies/methods available for any project. We have designed multiple solar water heating systems, geothermal systems, PV electric generation systems, and have extensive experience with successful direct digital controls systems (energy management systems). Our experience with the implementation of these systems on multiple projects has provided us with an understanding of available grants and incentives. We have also designed lake water cooled buildings that provide extremely high efficiency for building air conditioning. We have completed the design of thirteen buildings that have LEED certification (three platinum, five gold, five silver), completed the design of another five buildings that are registered and awaiting LEED certification, and are working on the design of another five projects that are to be registered in the LEED certification process. Wayne Nelson is a LEED accredited professional.

Team:
L.N. Consulting, Inc. has an experienced team of engineers and technicians that are capable of providing thoughtful master planning, highly accurate and detailed documents within a short period of time. We specialize in rapid document production with highly refined & coordinated detail. The team selected for this project is as follows:

Project Team Leaders	Wayne Nelson, Paul Lekstutis
Campus Energy Master Planning	Wayne Nelson, Paul Lekstutis
New Building Master Planning	Wayne Nelson, Paul Lekstutis, John Askew
Existing Building Evaluation Team	
Mechanical	Wayne Nelson, John Magnant, Paul Lekstutis
Electrical	John Askew, George Martin
Site Energy Distribution and Controls	
Mechanical	Scott Alexander, Aaron Welch
Electrical	John Askew, Ian Donahue
Central Plant (Biomass/CHP)	
Lead	Wayne Nelson
Mechanical	John Magnant
Electrical	John Askew
Mechanical Technical Assistance	Aaron Welch & Derek Siegler
Electrical Technical Assistance	George Martin, Ian Donahue

Experience
L.N. Consulting is very experienced in all aspects of this project. We are very proud of our accomplishments and success' in understanding life cycle cost effective methods in; redeveloping existing buildings into energy efficient/sustainable structures, integrating energy efficient solutions in historical structures, central campus heating and power plant master planning & design, campus energy distribution solutions, renewable energy production systems & integration, and understanding efficient campus energy master planning linked with available incentive vehicles. We feel that our team can provide the project with extremely clear, concise and timely information and analyses to assist the project team in developing great long term decisions. A list of comparable project experience examples are as follows:

Office/Multi-Use Buildings

Project Name: NRG Systems Expansion Project
Owner: NRG Systems, Martha Keenan, (802) 443 5326
Architect: William MaClay Architects, William MaClay, (802) 482 2255
Scope: L.N. Consulting completed the design and construction administration for the NRG Expansion facility. This facility is a 28,000 sq.ft. office/manufacturing building. This project uses geothermal well water cooling for radiant slabs and ventilation air. The system design includes high efficiency energy recovery ventilation with demand control distribution, occupancy lighting controls, day lighting controls, natural day light balancing of almost all spaces, domestic water solar heating, pellet wood boilers, 70 kW of PV power production, and natural nighttime outdoor air building cooling/ventilation. The building is 70% more efficient as compared to a minimally compliant ASHRAE building. The project has achieved LEED Gold certification and was awarded the Better Building by Design Award in 2009.
Budget: $ 6.5 million
Schedule: Completed 2007

Project Name: University of Vermont – Given Building Infill Project
Owner: John Evans, (802) 656-3117
Architect: Black River Design, Keith Robinson, (802) 223-2044
Scope: The Given Infill project consists of a new four story building located inside an existing glass roofed courtyard in the Given building. The project consists of 25,000 sq.ft. of office space with additional smaller renovations. We completed multiple rounds of energy modeling to determine life cycle cost effective approaches to glass roof modifications and HVAC systems selection. We also completed a computational fluid model for the smoke control system design. The mechanical system selected for the project is an under floor air distribution system which utilizes an existing modified air handling unit to provide the air distribution. The project also includes an atrium smoke control system, day light controlled atrium lighting, and occupancy sensor controlled lighting throughout. The project included the implementation of an energy recovery ventilation unit to provide more efficient conditioning of the buildings ventilation air. The lighting design achieved a 48% reduction in connected electrical load over the energy code requirements. The project accomplished LEED Gold certification.
Budget: $ 9 million
Schedule: To be completed 7/2009

Project Name: 88 King Street
Owner: Housing Vermont, Amy Demetrowitz, (802) 862-5382
Architect: Lemay Youkel Architects, John Rooney, (802) 864-9696

Scope: L.N. Consulting complete the design and construction administration for a mixed use building in Burlington, VT that supports Housing Vermont's central offices and 22 apartment units. The HVAC system was based upon a high efficiency water source heat pump system with energy recovery ventilation for the entire building. The heating system is composed of high efficiency condensing boilers with an indirect domestic water heating system. The electrical design includes high efficiency lighting with occupancy based controls for minimal energy usage. The project obtained LEED Gold certification.
Budget: $ 5.5 million
Schedule: Completed 2009

Project Name: St. Michael's College, Student Center and Residence Hall Expansion
Owner: James Farrington, (802) 654-2398
Architect: Freemen French Freemen, Jesse Beck, (802) 864-6844
Scope: L.N. Consulting has been retained to complete the design for the construction of a new Student Center and Residence Hall at St. Michael's College. The proposed Student Center is approximately 44,000 sq. ft. and includes dinning and food service programs. The Residence Hall is approximately 49,000 sq. ft. In addition, the project includes 12,600 sq. ft. of renovation within existing campus Residence Halls in order to integrate the new Student Center and Residence Hall building within an existing Residence Hall Complex. Our project design includes; natural light features, geothermal air conditioning, high energy efficient energy recovery ventilation systems with demand control ventilation, a building mounted photovoltaic array with a nominal nameplate rating of approximately 80kW, super-efficient lighting design that includes day light controls, envelope analysis to develop a cost effective/highly efficient building skin, economizer ventilation selection, and detailed mechanical control systems to minimize energy usage through active means. We have completed the design and development documents and the project is currently in the construction document phase.
Budget: $ 26.0 million
Schedule: To be completed in fall 2012.

Historical Buildings

Project Name: Champlain College Perry Hall Renovation Project
Owner: David Provost, Champlain College, (802) 865 6400
Scope: L.N. Consulting completed the design and construction administration for the Champlain College Perry Hall Renovation and Expansion Project. This project consists of the historical renovation and expansion of an existing residence (originally constructed in 1859) to accommodate the admissions and student support services of the college. At completion, the building will be approximately 30,000 sq. ft. The project HVAC systems include a geothermal heat pump system using an open source well with return well ground water system coupled to geothermal water source heat pumps. The building systems are independent of fossil fuels. The project also includes a demand controlled ventilation system using an energy recovery ventilator. The building lighting has a 0.3 watt/sq.ft. power density, and incorporates complete occupancy sensor controls and day lighting controls for spaces with exterior windows. The building has been utilizing less than 50% of the energy of an ASHRAE certified building due to the detail associated with the envelope physics, geothermal HVAC system design, and lighting design. The project has achieved LEED NC 2009 Platinum Certification.
Budget: $ 11.5 million
Schedule: Completed 2010

Project Name: Middlebury College Franklin Environmental Center Project

Owner: Middlebury College, Mike Moser, (802) 443-5326
Architect: SAS Architects, Steve Smith, (802) 863-2227
Scope: L.N. Consulting completed the design and construction administration of the renovation of the Middlebury College Franklin Environmental Center. The existing historic structure was renovated while a tasteful expansion was added to the South end of the building. The project consisted of 11,000 total sq.ft. This project includes high efficiency energy recovery ventilation, high efficiency lighting, 8.5 kW of PV panel power production, and a hybrid standing column/water source well geothermal heat pump air conditioning system. The building is utilizing less than 50% of the energy of an ASHRAE certified building due to the detail associated with the envelope physics, HVAC system design, and lighting design. This project has been awarded LEED Platinum certification and was awarded the Better Building by Design Award in 2009. The project was completed using a construction management contract.
Budget: NA
Schedule: Completed 2007

Project Name: Champlain College Aiken Hall Renovation Project
Owner: David Provost, Champlain College, (802) 865 6400
Architect: SAS Architects, Steve Smith, (802) 863-2227
Scope: L.N. Consulting completed the design for the Champlain College Aiken Hall Renovation Project. This project consists of the historical renovation of an existing residence (originally constructed in 1895) to accommodate faculty offices. The building is approximately 12,800 sq. ft. The project HVAC systems include two high efficiency air-to-air heat-pump ductless split systems for cooling and heating down to approximately 20°F outdoor temperature and high efficiency condensing hot water boilers coupled to radiant ceiling panels for heating when outdoor temperature is below 20°F. The project also includes a demand controlled ventilation system using an energy recovery ventilator. The building lighting was designed to 0.45 watts/sq.ft. power density and incorporated complete occupancy sensor controls. The building is expected to utilize less than 60% of the energy of an ASHRAE certified building due to the detail associated with the envelope physics, HVAC system design, and lighting design. The project has achieved a LEED NC 2.2 Gold Certification. The construction was completed and the building was occupied in January of 2009. The building was awarded the Better Buildings by Design Award in 2010.
Budget: $ 3.8 million
Schedule: Completed 2009

Campus Energy Master Planning & Central Energy Plants and Distribution

Project Name: Green Mountain College Biomass Project
Owner: Gary Marcy, Green Mountain College, (802) 287 8236
Architect: SAS Architects, Steve Smith, (802) 863-2227
Scope: L.N. Consulting completed the design and construction administration of a cogeneration wood chip heating plant for Green Mountain College. The project includes a 400 boiler horsepower steam boiler, 150 kW steam turbine electric generator, and all required auxiliary systems. The new biomass plant will reduce the energy costs to Green Mountain College by approximately $185,000.00 per year. We worked closely with Green Mountain College to develop the project from conceptual design through construction. L.N. Consulting was responsible for submitting the certificate of public good and working directly with CVPS to develop a plan for connection to the utility's 4.16 kV electrical distribution system.
Budget: $5.0 million
Schedule: Completed 2010

Project Name: Green Mountain College High Voltage Power Distribution Replacement and Upgrades Project
Owner: Gary Marcy, Green Mountain College, (802) 287 8236
Scope: L.N. Consulting is in the design process for Green Mountain College's high voltage power distribution replacement and upgrades project. This project is a multi-phased replacement of the existing underground and aerial high voltage power distribution with upgrades to improve system performance and longevity.
Budget: $ 750,000.00
Schedule: Completed 2009

Project Name: Burlington College – Campus Master Plan Project
Owner: Mike O'Malley, (802) 233-5681
Scope: L.N. Consulting completed an energy evaluation of the newly acquired Catholic Diocese campus in the North end of Burlington. Our energy evaluation included the recommendation to convert the buildings steam heating system to a high efficiency hot water heating system. We utilized the energy modeling data to develop the life cycle cost effectiveness of the conversion. We also developed the design to modify the existing steam heating system to a high efficiency hot water heating system with improved zone control.
Budget: $1.2 million
Schedule: Construction to be completed by end of 2011

Project Name: Middlebury College Biomass Project
Architect: CBT Architects, Emil Gosselin, (617) 262 4354
Scope: L.N. Consulting completed the design and construction administration of the new 800 boiler horsepower wood chip heating plant for Middlebury College. This plant was designed and connected to the existing cogeneration plant. The Middlebury College cogeneration plant has a capacity of 1500 kW. The new biomass plant will reduce the energy costs to Middlebury College by approximately $1,500,000.00 per year. We worked closely with Middlebury College to develop the project from conceptual design through construction. The project was completed using a construction management contract.
Budget: $12.5 million
Schedule: Completed 2009

Project Name: University of Massachusetts North Campus Infrastructure Improvements
Owner: University of Massachusetts, Jason Venditti (413) 577-4769
Scope: Multi-phased replacement of the existing underground steam and condensate return systems supporting multiple buildings with upgrades to improve system performance and longevity. Design provided for 1,125 linear feet of new walkable tunnel containing field fabricated 14" diameter steam and 4" condensate piping, 345 LF of trench (same size direct buried pre-insulated piping), and additional steam piping work within the interior of 10 new or renovated manhole structures.
Budget: $ 3.7 million mechanical construction cost
Schedule: 3/2008 to 2010

Project Name: University of Massachusetts UMA #07-52 Steam Line Replacements – Flint Way, Morrill II, & Orchard Hill
Owner: University of Massachusetts, Jason Venditti (413) 577-4769
Scope: Multi-phased replacement of the existing underground steam and condensate return systems supporting multiple buildings with upgrades to improve system performance and

longevity. Design provided for 2,350 linear feet of trench and 4,000 linear feet of direct buried pre-insulated and building/manhole interior steam and condensate return piping. Piping design included connections to seven existing buildings routed through four existing and one new steam manhole structures. Piping was of various pressures and sizes up to 125 psig and 16" diameter.
Budget: $ 3.0 million mechanical construction cost
Schedule: 2/2007 through 2/2008

Project Name: University of Massachusetts UMA #08-50 Steam Line Replacements – Flint Way, Phase II
Owner: University of Massachusetts, Jason Venditti (413) 577-4769
Scope: Multi-phased replacement of the existing underground steam and condensate return systems supporting multiple buildings with upgrades to improve system performance and longevity. Design provided for 1,170 linear feet of trench containing up to 10" diameter direct buried pre-insulated and building/manhole interior steam and condensate return piping.
Budget: $ 2.6 million mechanical construction cost
Schedule: 12/2007 through 12/2008

Project Name: UVM Given Building Mechanical Master Plan
Owner: UVM College of Medicine, Sue Ligon (802) 656-5020
Architect: Black River Design, Keith Robinson, (802) 223-2044
Scope: L.N. Consulting completed the mechanical master plan document for the UVM Given Building. The Given building is a 225,000 sq.ft. laboratory research building with an extremely diverse occupancy. This project encompassed a complete review of the entire buildings mechanical systems and occupant use with recommendations for future renovations and energy savings. The master plan initiative included a LEED evaluation for the proposed project.

Project Name: Copley Hospital Master Plan and Boiler Plant Project
Owner: Copley Hospital, Carol Ferrante, (802) 888-8794
Architect: Freeman French Freeman, Jesse Beck (802) 864-6844
Scope: L.N. Consulting, Inc. worked with Freeman French Freeman in developing a facility master plan for the hospital with a focus on: medical office building, central heating plant, surgical services, and ambulatory care services. We worked with Freeman French Freeman on the design of a new central heating plant, which was completed in 2009. L.N. Consulting was the mechanical and electrical engineer for the project.
Budget: $2.0 million
Schedule: Completed 2009

Project Name: Rutland Regional Medical Center Emergency Department & Power Plant Project
Owner: Rutland Regional Medical Center, Howard Stratton, (802) 747-3660
Architect: Freeman French Freeman Architects, Jesse Beck, (802) 864-6844
Scope: L.N. Consulting, Inc. worked with Freeman French Freeman, Inc. in developing a new remote power plant facility, emergency department expansion, and diagnostic imaging renovation for Rutland Regional Medical Center. The total construction cost was approximately $15 million. The remote power plant included: a new steam heating plant, chilled water cooling plant, electrical substation, and emergency generation plant. The basis of the plant design was reliability and energy efficiency. The plant project received many incentives from Efficiency Vermont for efficient design techniques. The emergency department project included: a 25,000 square foot expansion and 20,000 square foot renovation. The new addition was fitted with new mechanical and electrical infrastructure that also received many incentives from Efficiency

Vermont for efficient design techniques. The project was completed within an aggressive but achievable schedule and also within the State of Vermont certificate of need budget requirements.
Budget: $ 15.0 million
Schedule: Completed 2003

Project Name: Central Vermont Medical Center - Chilled Water Infrastructure Upgrade Project
Owner: Central Vermont Medical Center, Amy Slayton (802) 371 4100
Scope: L.N. Consulting, Inc. worked directly for Central Vermont Hospital as the prime consultant for the Chilled Water Infrastructure Upgrade Project. The proposed HVAC Infrastructure Upgrade Project included the design and construction of a new 800-ton centrifugal, water-cooled chiller and support infrastructure to support the Central Vermont Hospital. The water chiller is located in existing mechanical space.
Budget: $1.0 million
Schedule: Completed 2004

Project Name: Central Vermont Medical Center HVAC Infrastructure Upgrade Project
Owner: Central Vermont Medical Center, Amy Slayton (802) 371 4100
Scope: L.N. Consulting, Inc. worked directly for Central Vermont Hospital as the prime consultant for the HVAC Infrastructure Upgrade Project. The proposed HVAC Infrastructure Upgrade Project included the design and construction of a new 60,000 CFM air handler and support infrastructure to condition the second and third floors of the Central Vermont Hospital. The new air handler is housed in a penthouse constructed on the roof of the existing hospital. The existing programs supported by the proposed air handler are the ICU, Behavioral Health, Renal Dialysis, Respiratory Therapy, Birthing, Endoscopy, and Inpatient Services. The project was designed and phased to minimize air handler shutdowns. L.N. Consulting was the prime consultant and Mechanical and Electrical Engineer for the project.
Budget: $1.5 million
Schedule: Completed 2004

Project Name: Middlebury College – Fine Arts Center Steam Line Replacement
Owner: Middlebury College, Mike Moser, (802) 443 5326
Scope: Replacement of the existing underground steam and condensate return system between manhole and building with upgrades to improve system performance and longevity. Project included new steam manhole design.
Budget: $ 245,000.00
Schedule: 5/2006 through 12/2006

Project Name: Middlebury College – Forest Hall Steam Line Replacement
Owner: Middlebury College, Mike Moser, (802) 443 5326
Scope: Multi-phased replacement of the existing underground steam and condensate return systems supporting multiple buildings with upgrades to improve system performance and longevity.
Budget: $ 250,000.00
Schedule: 6/2004 through 9/2004

Project Name: Middlebury College – Freeman International Studies Center to Bicentennial Hall Steam Line Replacement
Owner: Middlebury College, Mike Moser, (802) 443-5326

Scope: Replacement of the existing underground steam and condensate return system between buildings with upgrades to improve system performance and longevity. Project included new steam manhole design.
Budget: $ 450,000.00
Schedule: 2/2007 through 7/2007

Project Name: Middlebury College High Voltage Power Distribution Survey and Corrective Action Project
Owner: Middlebury College, Mike Moser (802) 443-5326
Scope: L.N. Consulting is in the design process for the Middlebury College, high voltage power distribution survey and corrective action project. This project is a multi-phased replacement of the existing underground and aerial high voltage power distribution with upgrades to improve system performance and longevity.
Budget: NA
Schedule: 6/2008 through present

Project Name: Middlebury College – Starr Hall to College Library Steam Line Replacement
Owner: Middlebury College, Mike Moser, (802) 443 5326
Scope: Replacement of the existing underground steam and condensate return system between manhole and building with upgrades to improve system performance and longevity. Project included new steam manhole design.
Budget: $ 950,000.00
Schedule: 2/2007 through 7/2007

Renewable Energy/Alternative Energy

Project Name: 3 Cathedral Square PV Installation Project
Owner: Tim Ashe, Cathedral Square Corporation, (802) 863-2224
Scope: L.N. Consulting completed the design and construction administration for a 32 kW PV system on the roof of an existing senior citizen apartment building. The project involved working with Burlington Electric Department to verify energy reimbursements and incentives available, as well as all technical requirements including revisions to the building's existing electrical service.
Budget: $ 280,000.00
Schedule: Completed 2010

Project Name: 360 State Street
Architect: Becker and Becker, Bruce Becker, (203) 292-4900
Scope: L.N. Consulting was retained by an architect/developer to assist with energy efficiency, electrical, and mechanical design assistance associated with a 500 unit apartment building with 50,000 sq.ft. of office/retail space in New Haven, Connecticut. The proposed building is 31 stories tall and is fitted with a high efficiency heat pump system with an energy recovery ventilator system for bathroom exhaust/ventilation. The building is to be fitted with a fuel cell which will provide a bulk of the building heat, domestic water heat, pool heat and building electricity. We worked closely with the design team to incorporate creative energy efficiency methods with respect to heating/heat pump system piping configurations, differential pressure loop controls, and implementation of occupancy and daylight controlled lighting. We completed the development of a more sustainable electrical distribution system that also accommodated the power supplied by the fuel cell. This project included working with the local utility and state agencies to accommodate the fuel cell power supply, including requesting electrical code variances due to the latest technologies involved with fuel cells. L.N. Consulting also

investigated several options for achieving the greatest economic value of the fuel cell, such as implementing a method to provide as much building load to the fuel cell as possible to allow a higher $/kWh return on investment, as well as implementing waste heat for building heating. The project is receiving a large green building credit from the State of Connecticut due to its leadership in integrated energy efficient design. The project has achieved LEED Platinum certification.
Budget: $ 135 million
Schedule: Completed 2010

Project Name: 888 Main Street, Roosevelt, Island, NY Fuel Cell
Owner: Becker & Becker, Bruce Becker, (203) 292-4990
Scope: L.N. Consulting provided electrical and mechanical design services to install 400 kW fuel cell to supplement building load to an existing 13 floor combination residential/commercial building. This project included revising the existing electric service to accommodate the fuel cell. L.N. Consulting is also acting as an agent to the owner providing all the applications to the local utility and state code enforcement agencies.
Budget: NA
Schedule: Completed 2011

Project Name: Camels Hump Middle School PV Installation Project
Owner: Chittenden East Supervisory District, Laura Nassau (802) 434-2128
Scope: L.N. Consulting completed the design and construction administration services for the installation of a 70 kW PV power generation system on the roof of the existing Camels Hump Middle School. L.N. Consulting submitted and was granted a certificate of public good for the 70 kW PV System. The project involved working with Green Mountain Power to verify energy reimbursements and incentives available, as well as all technical requirements including revisions to the building's existing electrical service.
Budget: NA
Schedule: Completed 2010

Project Name: Maxwell Farm "Cow Power" Cogeneration Project, Coventry, VT
Contact: Vermont Electric Cooperative, Dean Denis, (802) 635-2331
Scope: L.N. Consulting assisted Vermont Electric Cooperative (VEC) to connect the farm's 225 kW methane generator to the overhead utility circuits. The project involved investigating the protective device settings of the generator, making recommended changes, and providing overhead protective device ("reclosers") relay settings. L.N. Consulting also programmed and tested the reclosers and was present when the generator was first tied to the utility's electrical distribution system.
Budget: NA
Schedule: Completed 2009

Project Name: Shelburne Farms PV Installation Project
Owner: Shelburne Farms, Alec Webb, (802) 985-8686
Architect: SAS Architects, Steve Smith, (802) 863-2227
Scope: L.N. Consulting completed the first phase design to install up to 45 kW of PV panels on the roof of the Shelburne Farm Barn. L.N. Consulting submitted and was granted a certificate of public good for the first 15 kW. The project involved working with Green Mountain Power to verify energy reimbursements and incentives available, as well as all technical requirements including revisions to the building's existing electrical service.
Budget: $300,000.00

WAYNE E. NELSON – PRESIDENT

Wayne Nelson co-founded L.N. Consulting in 1999. Wayne has been a principal and president of the company since 1999. He has immense experience in diverse projects with master planning, conceptual design, detailed design, and construction administration. Wayne acts as the company manager and project manager for multiple large and small projects.

Academic Qualifications:

- State University of New York, Maritime College, B.E. of Marine Engineering, 1994

Licenses:

- Professional Engineer – Vermont, New York, New Hampshire, and Rhode Island

Professional Affiliations:

- LEED Accredited - 2004
- USCG

EXPERIENCE

1999 to present **L.N. Consulting, Inc.**, Winooski, VT

Owner. Manage and develop a mechanical and electrical engineering firm. Provide engineering management and design services for diverse construction projects. Utilize engineering and construction knowledge to provide high quality mechanical and electrical design services for multiple clients. Develop implementation design of new/leading edge engineering systems to support energy efficiency and sustainable building design in a practical manner.

1994 - 1999 **Salem Engineering**, Shelburne, VT

Project Engineer. Provide mechanical and electrical engineering design, construction management and project management services for diverse projects. Utilize hands on experience with engineering systems to help deliver quality and creative solutions for facility concerns. Work closely with client, design team and contractor to deliver economy, function and satisfaction in construction projects.

PAUL B. LEKSTUTIS – VICE PRESIDENT

Paul Lekstutis co-founded L.N. Consulting in 1999. Paul has been a principal and vice president of the company since 1999. He has immense experience in renewable energy projects with master planning, conceptual design, detailed design, and construction administration. Paul assists in company management and acts as project manager for multiple projects.

Academic Qualifications:

- State University of New York, Maritime College, B.E. of Marine Engineering, 1994

Licenses:

- Engineer Intern – Vermont

Professional Affiliations:

- USCG Second Assist. Engineer of Motor and Steam Vessels of Unlimited Horsepower

EXPERIENCE

1999 to present **L.N. Consulting, Inc.**, Burlington, VT

Principal Consultant Engineer. Manage the development of an engineering firm. Provide engineering management and design services for diverse construction projects. Utilize engineering and construction knowledge to provide high quality mechanical and electrical design services for multiple clients.

1998 - 1999 **The LiRo Group**, Syosset, NY

Project Engineer/Resident Engineer. Provide mechanical, electrical and civil engineering design, construction management and project management services for diverse projects. Utilize hands on experience with engineering systems to help deliver quality and creative solutions for facility concerns. Work closely with client, design team and contractor to deliver economy, function and satisfaction in construction projects.

1997 - 1998 **HEC Energy and Design Services**, Smithtown, NY

Project Engineer. Provide energy management, and construction management services for diverse projects. Utilize hands on experience with engineering systems to help deliver quality and creative solutions for facility concerns. Work closely with client, and contractors to deliver economy, function and satisfaction in construction projects.

1994 - 1997 **Transoceanic Cable Ship Company**, Morristown, NJ

Second Assistant Engineering Officer aboard *the Cable Ship Global Link*. Responsibilities include the continuing safe operation of the Power Generation, Main Propulsion, and all supporting equipment. Provide supervision of unlicensed personnel through technical repair and maintenance, the purchasing of spare parts, the preparation of plans and specifications for the redesign of the ship's operational systems.

1995 Summer **SUNY Maritime College**, Bronx, NY

Senior Training Engineer aboard *the Training Ship Empire State*. As Training Engineer, responsibilities included the continuing safe operation of the Power Plant, and the supervision and instruction of cadets on proper technical maintenance procedures.

JOHN MAGNANT

EDUCATION

Industrial Electronics Certification
Cleveland Institute of Electronics, Cleveland OH, 1979

Drafting, Surveying, Soils and Pavement Testing Certification
United States Air Fore Technical School, Wichita Falls TX, 1977

EXPERIENCE

2003 to present **L.N. Consulting, Inc.**, Burlington, VT

Project Engineer. Provide engineering management and design services for diverse construction projects. Utilize engineering and construction knowledge to provide high quality mechanical and electrical design services for multiple clients.

2002 - 2003 **UAI Associates**, Williston, VT

Project Engineer. Senior mechanical designer for industrial HVAC systems, piping systems and controls. Responsibilities include feasibility studies, budget development, field survey, and production of project documents.

1996 - 2002 **Flour Daniel Corp**, Essex Jct. VT, NY

Project Engineer. Senior mechanical designer for industrial HVAC systems, piping systems and controls. Responsibilities include feasibility studies, budget development, field survey, and production of project documents. Projects included the following: Review and design services for the installation of Lithography tools at International Business Machines (IBM) Essex, Vermont facility. These tools required critically stable temperature and humidity environments with ultra clean air. A high pressure compressed air system was designed with high pressure nitrogen back up along with other "high purity" process gases to support the tool operation. Each tool was equipped with a clean-agent type fire suppression system. All services were monitored and controlled with programmable logic controllers; the review and design services for the installation of Integrated circuit manufacturing tools at International Business Machines (IBM) Essex, Vermont facility. These tools required a multitude of chemicals, toxic and high purity gases. Each system has numerous components and safeties for each chemical or gas. Varies systems of exhaust were required for the different process; acid, solvent, heat, etc. Generally temperature stable, ultra clean air was required. Ultra pure cold and heated water was needed for the tools, with local filtration and recirculation control. Process cooling water was required in as many as three different temperatures. Waste streams for acid and organic chemicals had to be properly separated and piped. Operator and maintenance clearances had to be established and maintained; and the design of toxic, solvent and general exhaust systems, exhaust stream solvent recovery and acid neutralization, make-up air handlers, reheat and humidity control, toxic gas storage upgrades, chemical pumping, distribution and reclaim, high purity gas distribution, heating and cooling process water generation and distribution.

JOHN ASKEW - PRINCIPAL

Academic Qualifications:

- Clarkson University, 1985, B.S. of Electrical Engineering

Licenses:

- Professional Engineer – Vermont, New York, New Hampshire, Maine, Massachusetts, Connecticut

Professional Affiliations:

- IEEE - Secretary 1991
- National Society of Professional Engineers
- Vermont Society of Engineers

EXPERIENCE

2001 to present **L.N. Consulting, Inc.**, Winooski, VT

Senior Engineer. Provide electrical distribution, lighting, fire protection systems design and consulting services for new and renovation construction projects.

1995 to 2008 **Burlington Electric Department**, Burlington, VT

Senior Engineer. Provide medium and low voltage electrical distribution systems design for infrastructure redevelopments and customer infrastructure upgrades and services. Provide energy analyses and coordination studies for electrical distribution systems.

1989 – 1995 **Thermo Consulting Engineers**, Williston, VT

Project Engineer/Project Manager. Provide electrical engineering design, construction management and project management services for diverse projects. Design lighting and electrical distribution systems for utilities and facilities. Provide building energy analyses for diverse projects.

1988 – 1989 **Hertzberg Consulting Engineers**, Burlington, VT

Project Engineer/Project Manager. Provide electrical engineering design, construction management and project management services for diverse projects.

1985 – 1988 **Florida Power and Light Company**, Cocoa, FA

System Protection Field Specialist. Provide installation, maintenance and troubleshooting of system protection relay system; generation, transmission and distribution. Primary responsibilities also included acting as field engineer between design engineers and substation crews or contractors.

M. SCOTT ALEXANDER, P.E.

EDUCATION

Master of Engineering with specialization in Mechanical Engineering
Bachelor of Science in Engineering Science
University of Louisville, Speed Scientific School, Louisville, Kentucky, 1989

LICENSES

Professional Engineer in Vermont, New Hampshire, Rhode Island, Ohio, and Virginia; NCEES Recordholder; ASHRAE member; Lifetime member Tau Beta Pi engineering honor society.

EXPERIENCE

2006 to present **L.N. Consulting, Inc.**, Burlington, VT

Project Manager. Provide mechanical and electrical engineering management and design services for diverse construction projects. Utilize engineering and construction knowledge to provide high quality mechanical and electrical design services for multiple clients.

2002 - 2006 **Stantec (formerly Dufresne-Henry, Inc.)**, South Burlington, VT

Senior Project Manager (Mechanical) in facilities/building engineering division and later in Bio/Pharmaceuticals practice center on numerous projects. Managed the mechanical department at Dufresne-Henry which involved marketing and proposal preparation as well as ensuring that mechanical resources located in two offices were appropriately assigned to projects. Performed role of mechanical design lead engineer for many university, pharmaceutical, microelectronics, municipal, commercial, private industry, recreational, industrial, and military projects. Detailed designs included several installations of direct-buried, pre-insulated steam and condensate piping.

1994 - 2002 **Fluor Daniel**, Cincinnati, OH

Design engineer in building mechanical section of facilities department. Functioned as discipline mechanical lead engineer on multiple successful large consumer product manufacturing projects. Worked several years on a large industrial construction job site performing contract manager role, primarily for mechanical, fire alarm, HVAC and controls construction contracts. Numerous projects involved design of 10 to 150 psig steam distribution systems in a campus-type industrial plant, primarily as associated with building heating. Responsible for writing and managing execution of HVAC system qualification documents, as required for product validation in clean rooms and locally controlled environments on pharmaceutical project. Prepared microelectronics projects designs, including scrubber and clean room makeup air unit replacements, tool process exhaust system, and several complex fan studies.

1990 - 1994 **The Ralph M. Parsons Co.**, Pasadena, CA

Mechanical Utilities Engineer. Responsibilities included HVAC calculations and CAD design for federal government and private industry projects.

ENERGY BALANCE, INC.

Energy Balance, Inc.

160 White Rock Dr. #1 Montpelier, VT 05602
andy@energybalance.us
(802) 229-5676 522-0165 (c)

Energy Balance, Inc., has provided energy and other green building design consulting services for 30 years to a wide variety of clients, including owners, architects, engineers and builders, as well as housing developers, universities, businesses and electric utilities. Services range from sustainable building design to research and monitoring projects. Andy Shapiro is also the Energy Engineer for the Vermont Energy Education Program, training teachers and students. Recent projects include the Putney Field House, LEED Platinum, net zero, NRG Systems manufacturing and office facility and addition, (both 95% renewably powered – both LEED Gold) in Hinesburg, VT; Bennington State Office Building, lowest energy use of any Vermont State facility; Waterfront Housing, first LEED rated affordable housing, lowest energy use affordable housing in the Northeast for several years, Home Depot Foundation national award winner; and several "net-zero" houses, including the first proven net zero house in the Northeast to be recognized by the Northeast Solar Energy Association.

Services include:

- whole-building/whole-systems thinking throughout design, construction and operation of the building.
- goal setting and prioritization
- design and construction team selection
- building enclosure systems analysis and selection
- computer-based energy modeling of building and building sub-system performance
- HVAC systems selection
- occupancy and other analysis to develop accurate building loads
- building science input to insure that building enclosures are durable, air-tight, well insulated and handle moisture properly
- building enclosure detailing
- daylighting design and analysis
- renewable energy systems analysis and systems selection
- selection of systems for optimum indoor air quality
- water use reduction strategy analysis
- input into and review of schematic, design development and construction documents
- on-site crew training in new techniques
- on-site air leakage testing and checking of all high performance features
- analysis of actual operation of building during at least the first year of operation
- assistance with identifying and remedying warranty and other operating issues
- education of public on building features

Andrew M. Shapiro

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Montpelier, VT 05602
802.229.5676
andy@energybalance.us

High performance building design consulting for new and existing single and multi-family housing, schools, commercial and institutional buildings; reviewing and recommending energy systems (HVAC), building envelope, daylighting, systems durability, moisture control, indoor air quality, and materials and systems choices. Computer modeling of building performance in support of the design process, integrated systems analysis, schematic, design development and construction document review, cost/benefit, cash flow and life-cycle analysis and on-site training and supervision for installation of high performance features. Services range from sustainable building design to research and monitoring projects.

Energy Scientist for the Vermont Energy Education Program, teaching from elementary to high school to college level, principles and applications of energy efficiency and renewable energy, training both students and teachers. (www.veep.org)

Current and Recent projects:

- Envelope consultant and commissioning for the Vermont Forensics Laboratory, Waterbury, VT
- Energy consultant for the existing Vermont Public Safety Building rehabilitation, Waterbury VT.
- Envelope commissioning for the Fletcher Allen Health Care Oncology Addition, Burlington, VT
- Environmental design consultant for the reconstruction and addition to the Aiken Building of the University of Vermont School of Natural Resources, Burlington VT
- Energy and building envelope design consultant and building envelope commissioning for the reconstruction and addition to the Bennington District and State Office Building, Bennington, VT
- Environmental design consultant for the new Brattleboro Food Co-op, including 24 units of housing above. Innovative use of enormous waste heat from store refrigeration to provide the bulk of heating loads.
- Environmental design consultant for the Putney Field House, a "net zero" 16,000 sq.ft. LEED Platinum facility at the Putney School, Putney, VT.
- Environmental design consultant for the 30,000 sq.ft. expansion of the NRG facility to house a new manufacturing program, with similar but improved systems as the current NRG facility. LEED Gold. 90 to 95% renewably powered.

- Energy consultant and designer for the Two Rivers project of Foodworks, Montpelier, Vermont, including energy retrofit for historic house and barn, including, classrooms, display spaces, offices, teaching kitchen and low-energy-use food storage facility with root cellars and walk-in coolers located below flood plain level.
- Systems design for "zero carbon" 6-unit "cohousing" project, including passive solar, super-insulated units, with common wood-pellet fired boiler.
- Energy consultant and designer for three "net zero" houses in Vermont, with ultra-insulation, passive solar and renewable electricity powered heat pumps for heat and hot water, and performance monitoring. One of these, the David Pill house, received the Northeast Sustainable Energy Association prize for proving to be the first net zero house in the Northeast. See Fine Homebuilding Summer 2009, No. 203 for article on Stone house.
- Study of actual in-place, total system performance of ground source heat pumps in net-zero houses, including specification of monitoring equipment, data collection and analysis. Report anticipated July 2009.
- Environmental design consultant for the new sanctuary for the Champlain Valley Unitarian Universalist Society, Middlebury, Vermont
- Environmental design consultant for the reconstruction of the Old Dairy Barn at Shelburne Farms into the Residential Learning Center. Currently in schematic design.
- Environmental design consultant for the Wind NRG manufacturing and office facility, a 45,000 sq. Ft. state-of-the-art building in Hinesburg, VT, incorporating daylighting, super-insulation, 65% renewable electricity and heating sources, innovative radiant slab for both heating and cooling, pond heat rejection, automatic lighting controls and more. LEED Gold.
- Environmental design consultant for Burlington Land Trust and Housing Vermont, for Waterfront Apartments, a 40 unit high performance affordable apartment building in Burlington Vermont, the first LEED certified affordable housing project in the US. Awarded first place in Home Depot Foundation national competition for green affordable housing. One of lowest energy affordable housing projects in the Northeast US.
- Environmental design consultant for ECHO Center for Lake Champlain, a science museum focusing on Lake Champlain, Burlington, VT, Vermont's first LEED certified building.
- Environmental design consultant for the Downtown Bennington State Office Building, incorporating high efficiency thermal envelope, ground source heat pumps, energy recovery ventilation, high efficiency lighting with automatic controls. Lowest energy use of any Vermont State Building.
- Environmental design consultant to the New Jersey Department of Community Affairs Sustainable Design/Affordable Housing Pilot Program. Work included development of rules and guidelines for affordable housing, monitoring projects and technical consultation.
- Design and execution of a side-by-side field study of durability of paint on historic houses, varying surface preparation techniques, for Vermont Energy Investment Corporation,
- Consultant to Vermont Energy Investment Corporation, data analysis and

recommendations for a study of performance of exhaust-only ventilation for single-family house.

- Analyst for Study of Renewable Electric Resources for Rhode Island and Massachusetts, solar domestic hot water heating systems.
- Principal investigator for the Vermont Division of Historic Preservation for *Testing the Energy Performance of Historic Wood Windows in Cold Climates.*
- Principal investigator of *A Field Study of Ventilation, Indoor Air Quality and Energy Use Associated with Three Ventilation system Types in Elderly Housing*, research comparing performance of three ventilation system types in Central Vermont.

EDUCATION

Brown University, Bachelor of Arts in Engineering, Magna Cum Laude with Honors. (1988)

PROFESSIONAL AFFILIATIONS

New England Sustainable Energy Society
American Solar Energy Society
US Green Building Council LEED accredited professional
American Society of Heating Refrigerating and Air Conditioning Engineers (ASHRAE)

CONFERENCE PRESENTATIONS

US Green Building Council, Greenbuild
Northeast Sustainable Energy Association, numerous years.
Efficiency Vermont, Better Buildings by Design, numerous years
ASHRAE Montreal, 2011

SELECTED PUBLICATIONS

Testing the Energy Performance of Wood Windows in Cold Climates, with B. James, 1996
Market-Based Program Designs for Accelerated Implementation of Rooftop Photo-Voltaics in New England, with Blair Hamilton, VEIC, April, 1996
Quiet Bathroom Fans, Journal of Light Construction, August 1995. *Simple Whole House Ventilation,* Journal of Light Construction, August 1995
A Field Study of Ventilation, Indoor Air Quality and Energy Use Associated with Three Ventilation System Types in Elderly Housing, November 30, 1994
An Integrated Assessment of Electric Power Resource Options in the U.S. Virgin Islands, co-author, with L. Hill ORNL and R. Chronowski, AEDI, ORNL/TM-12186, May 1993.
Efficient Energy Use, ES 41/42, curriculum for Brown University class in energy efficiency.
The Complete Guide to Add-On Solar Greenhouses and Sunspaces, Rodale Press, 1985.

Criterion 2: Strength of Design Team

- The Team shall designate, in writing, a Team Leader to serve until the expiration of any resulting Contract.

The Team Leader for this project shall be Tyler Scott, A.I.A., Principal of Scott + Partners, Inc.

- Has the Team won any awards for green building or energy conservation?

Scott + Partners won two "Best of the Best" awards from Efficiency Vermont in 2010, including:

- Vermont State Forensics Lab Project
- East Montpelier Emergency Services Building

LN Consulting was involved with the following projects that won Better Buildings by Design Awards from Efficiency Vermont:

- Middlebury College Franklin Environmental Center Project (2009)
- Champlain College Aiken Hall Renovation Project (2009)
- NRG Systems Expansion Project (2009)

- Has the Team demonstrated that they have a solid understanding of the technical aspects of the project?

As the Team Leader, our goal is to look at any project we might want to be involved in and ask the simple questions of "What do we know about the issues and what don't we know?" We feel strongly that in this case, given our recent experience with projects at the WSOC both before and after Tropical Storm Irene, and our many years of previous experience that the team of consultants we have assembled together have a very strong base of knowledge with which to provide the State a thorough and accurate assessment of the possible solutions and associated costs. The major technical issues can be divided into the individual building analysis and the overall campus issues as follows;

Individual Building Analysis:

- The condition of the exterior shell of each building. Can it be reasonably upgraded to be a quality, long term energy efficient building shell?
- The condition of the existing structure and its long term prospects

- The existing HVAC, plumbing and electrical systems and their condition
- The historic significance of the building within the existing context.
- The ability of the general building layout to meet the needs of the State programmatic requirements and the current building codes.
- New Building Conceptual Design

Campus Analysis:

- Develop an accurate depiction of existing and proposed campus energy use and distribution for multiple scenarios.
- Determine what buildings need flood proofing and how can that be achieved
- Determine the overall parking and pedestrian access requirements
- Site Energy Distribution Evaluation
- Central Heating/Power Plant Evaluation
- New Building siting and location determination

The team of consultants we have proposed we feel has not just adequate but considerable expertise in dealing and working through the technical aspects of these issues. We would recommend a thorough review of the experience of each consultant's experience.

- Has the Team worked together before?

Scott + Partners has worked with all of the proposed consultants on previous projects and are currently working with most on other projects. Please refer to their individual project resumes.

- What experience has the Team had experience with designing buildings to "Advanced Buildings" protocol and "High Performance design Guidelines"?

The "Advanced Buildings" protocol and "High Performance design Guidelines" are outlined in the Core Performance Guidelines as developed by the New Buildings Institute and adopted by the State of Vermont and Efficiency Vermont. These address Design Process Strategies, Core Performance Requirements, Enhanced Performance Strategies, and Energy Modeling techniques with the goal for more energy efficient buildings. We have worked to meet or exceed these standards in many of our projects over the past few years in both new construction projects and, when possible, major renovations. Typically, any project that meets LEED accreditation standards will achieve these standards. In addition to those projects noted in Criterion 1 under "Energy Efficient Project", other recent projects designed by our firm that meet these standards include;

- **New office Building for CSAC, Middlebury, VT.** A 26,000sf three story building that met the Core Performance Guidelines.
- **Dealer.com Headquarters, Burlington, VT.** A 65,000sf major renovation to an industrial building in downtown Burlington. Achieved LEED Silver rating and met the Core Performance Guidelines.
- **New 75,000sf Addition (Phase 2) for Dealer.com.** This is in the process of being LEED Silver certified and meets the Core Performance Guidelines.
- **Avenue Apartments Project, Burlington, VT.** A new 33 unit multi-family housing project designed in the north end of Burlington as part of the overall Thayer Commons Development.
- **Thayer House Senior Housing, Burlington, VT.** A new 33 unit senior housing project designed in the north end of Burlington as part of the overall Thayer Commons Development.

- Has the Team successfully designed biomass or co-generation facilities?

Although Scott + Partners has recently been involved in a successful project incorporating biomass (pellet) fuel source (The East Montpelier Emergency Services Building), the scale of this project requires experience with larger biomass facilities. LN Consulting has had experience in this field and specifically with the following projects:

- **Middlebury College Biomass Project.** L.N. Consulting completed the design and construction administration of the new 800 boiler horsepower wood chip heating plant for Middlebury College. This plant was designed and connected to the existing cogeneration plant. The Middlebury College cogeneration plant has a capacity of 1500 kW. The new biomass plant will reduce the energy costs to Middlebury College by approximately $1,500,000.00 per year.
- **Green Mountain College Biomass Project.** L.N. Consulting completed the design and construction administration of a cogeneration wood chip heating plant for Green Mountain College. The project includes a 400 boiler horsepower steam boiler, 150 kW steam turbine electric generator, and all required auxiliary systems. The new biomass plant will reduce the energy costs to Green Mountain College by approximately $185,000.00 per year.

- Has the Team had experience with ground water source heating and cooling systems?

LN Consulting has had experience in this field and specifically with the following projects:

- **Champlain College Perry Hall Renovation Project.** This project consists of the historical renovation and expansion of an existing residence (originally constructed in 1859) to accommodate the admissions and student support services of the college. At completion, the building will be approximately 30,000 sq. ft. The project HVAC systems include a geothermal heat pump system using an open source well with return well ground water system coupled to geothermal water source heat pumps. The building systems are independent of fossil fuels.
- **Middlebury College Franklin Environmental Center Project.** This project includes high efficiency energy recovery ventilation, high efficiency lighting, 8.5 kW of PV panel power production, and a hybrid standing column/water source well geothermal heat pump air conditioning system.

- Has the Team had experience with large scale solar projects?

Scott + Partners has been involved with two building mounted solar projects, the State of Vermont Forensics Lab, and we are currently working with Liebert Engineering on the design of a large PV solar array for the Avenue Apartments Project in Burlington. From an architectural standpoint, we appreciate and understand the issues involved with these systems. From an engineering standpoint, LN consulting has experience with designing both hot water and PV solar arrays, including:

- **3 Cathedral Square PV Installation Project**
- **Shelburne Farms PV Installation Project**
- **Camels Hump Middle School PV Installation Project**

- Does the Team include the services of a qualified architectural historian?

We have included Suzanne Jamele on our team and have worked with her previously on a project in Barre, VT. The role of the architectural historian will be to coordinate with the project team to ensure the proposed plan for reusing the Complex will take into consideration effects of the various project components on the historic buildings at the Complex, as well as the Complex as a whole. It will also take into consideration any effect the proposed actions will have on the historic village, of which the Complex is a critical component. The architectural historian will ensure that the proposed plan complies with the Vermont Historic Preservation Act. Please refer to her resume and list of completed projects.

Criterion 3: Ability to Meet the Schedule.

The State has outlined a proposed schedule in the RFP that sets specific start and end dates to the reports. We appreciate the reasons for the limited time frame and will provide as much information as required within that time frame. However, given the nature and size of the WSOC, we also anticipate continuing to provide more detailed information in the months following the March 2, 2012 initial deadline. We also understand that the State intends to award the contact no later than January 3, 2012. We would seriously encourage the State to do what is possible to allow for an earlier start date. The schedule outlined below is based on the understanding that we would have received a functional Program by the time the contract is awarded. And, as with most things, the schedule is negotiable.

Proposed Schedule of Work:

Task:	Team members	Start	End
Receive Functional Program	S+P	Mid – Dec.	
Receive contract from BGS	S+P, BGS	01.03.12	01.03.12
Individual Building Assessments	S+P, LN, EV, SJ	01.04.12	01.23.12
Site Energy Distribution Evaluation	LN	01.04.12	01.23.12
Assessment of site – Grading parking, walks, plantings, etc.	HKW, EV, S+P	01.04.12	01.23.12
Central Heating/Power Plant Evaluation	LN, S+P	01.04.12	01.23.12
Provide interim building and site assessment report. Review with BGS	All team members	01.23.12	02.01.12
Flood Proofing Analysis	EV, S+P, HKW	01.10.12	02.14.12
Overall Campus Master Planning	All team members	02.01.12	02.14.12
New Building Conceptual Design	All team members	02.01.12	02.14.12
Cost estimating	Barden	02.15.12	03.01.12
Final report and schematic Master Plan	All team members	02.15.12	03.01.12

- **Project Staffing:**

Scott + Partners has a total of nine staff, including three architects and three project designers and support staff. In addition, we will retain the services of Keith Anderson, R.A., John Rooney, A.I.A., and Lisa Rovner, A.I.A. as required to assist with providing design and documentation services. The Team will be led by Tyler Scott, A.I.A, and the core project team for Scott + Partners will include John Alden, A.I.A., Jamie Gravel, Emily Albright and Tonya Forcier.

Engineering Ventures: David Boehm, P.E. will serve as the Engineering Ventures Principal in Charge and Point of Contact. In addition, Bob Neeld, P.E. will provide structural engineering oversight. As a company of 30, the firm has the depth and breadth to perform multiple task orders simultaneously. Based on current commitments and planning, the firm will be able to meet the man-power requirements for this project and to complete the project in accordance with the schedule.

H. Keith Wagner Partnership will be led by Jeff Hodgson, ASLA, and Kieth Wagner, ASLA. Additional staff will include Amy Houghton, Carolyn Orben and Mike Sullvan.

L.N. Consulting, Inc. has an experienced team of engineers and technicians that are capable of providing thoughtful master planning, highly accurate and detailed documents within a short period of time. We specialize in rapid document production with highly refined & coordinated detail. The team selected for this project is as follows:

Project Team Leaders	Wayne Nelson, Paul Lekstutis
Campus Energy Master Planning	Wayne Nelson, Paul Lekstutis
New Building Master Planning	Wayne Nelson, Paul Lekstutis, John Askew
Existing Building Evaluation Team	
Mechanical	Wayne Nelson, John Magnant, Paul Lekstutis
Electrical	John Askew, George Martin
Site Energy Distribution and Controls	
Mechanical	Scott Alexander, Aaron Welch
Electrical	John Askew, Ian Donahue
Central Plant (Biomass/CHP)	
Lead	Wayne Nelson
Mechanical	John Magnant
Electrical	John Askew

Additional Team members: Sue Jamele (Historic Preservation), Andy Shapiro (Energy Balance) and Tom Barden (Cost Estimating).

Criterion 4: Project Approach

Work Scope and Process:

There is a careful balance to strike with the scope of work as outlined in the RFP versus the time available to produce that information. Given the information we all can envision needs to be generated to carefully assess the options and clearly envision a series of feasible options for the future of the WSOC, it is our opinion that the information may need to be provided in stages as certain decisions are made as to directions to pursue. This is an existing significant collection of buildings and real estate owned by the State that in the past has been adopted in varying degrees of quality to the required functions. Some of those functions may have been eliminated, but there is no question that many of the buildings could continue to serve as quality functional office buildings given the required resources to repair and upgrade them. The question is, of course, is how much and what is the cost. Determining this, at least to a schematic degree, must be step one. So what could be completed in two months and what is our process?

Individual Building Assessment: First, we would develop a matrix of variables in conjunction with input from all Team members and BGS. There will then be a series of conditions or variables against which each building needs to be assessed and also help determine in the end what buildings are to remain. At this point we see this as including the following;

- **Overall Flood Risk**: The reality of the situation is that the lower floors of most buildings are subject to flooding at some point in the future. Some buildings we may find that it makes sense to remove, however, the floodproofing the remaining will be a significant undertaking should the state decide this is the logical path to take.
- **The Structural Condition**: Initially, a schematic structural analysis will be conducted to determine the condition of the structure, and the scope & the feasibility of repairs if determined necessary.
- **The Condition of the Envelope:** We would need to look at each building's exterior wall composition including condition of the masonry, insulation levels, windows & door openings, and roofing. We would need to assess the question of how feasible is it to being insulated in a similar manner to the DPS building, would the envelope need to be replaced, or what are other options? It should be understood that from our experience with the DPS building that, although

brick analysis will be necessary at some point in the process, getting that information will not likely be feasible within two months.

- **How adaptable is the overall building layout to future office functions**? There is a wide variety of building configurations on the campus, and some will work better and provide better quality workspace than others. We will base our assessment on the Owner's Project Requirements received from BGS. From there we intend to look at the overall campus assets and the ability of the individual buildings or portions thereof to meet the programmatic requirements. We do not envision for this Feasibility Study, providing a detailed layout of each building. We will, however, identify recommended locations for the various functions and tie this into the overall master plan.
- **Existing/Proposed Building HVAC and Electrical Systems**: We will provide an existing conditions general field survey of the existing campus buildings systems with conceptual design services for existing building renovations, and new buildings development. In addition, we will ensure that the MEP systems assessment by LN consulting, the energy modeling by Energy Balance, and the envelope assessments and recommendations are a coordinated effort.
- **Assess Historic Significance**: Although most buildings on site are historically significant, the goal here is to achieve a reasonable and acceptable balance between removal, repair and renovation. We will be working directly with our historic preservation specialist to assist us with this task as we assess the buildings in light of the other conditions. We will be involved in the negotiations with the Division for Historic Preservation Office and BGS to determine a final direction for any proposed removal or renovation of the existing structures and overall master planning. In coordination with the project team, each building at the complex will be visited and assessed for potential continued use as well as for its historic significance. Since the National Register nomination was prepared in 1976, some buildings may be considered historic that were not at that time, having passed the critical 50 year age mark. Others may no longer be significant due to substantial alteration. Existing conditions reports will be reviewed and taken into consideration. The team will evaluate the most feasible approach to developing a campus that will retain as many buildings as possible. This is likely to require removal of some buildings and construction of one or more new buildings with related landscaping, parking, utilities, etc. The architectural historian will work with the architects to identify those buildings that may be expendable in order to allow retention of the most historic and visible buildings in the complex.

Factors to be taken into consideration are age, condition, location, potential for compatible new construction, potential for any new buildings to provide future flood protection for the historic buildings that would stand to their east. Ideally the new plan would retain at least one building from each general period of growth at the Complex, preserving a visual record of the complex's history. Historic buildings that are retained will be renovated following the *Secretary for the Interior's Standards for Rehabilitation* in order to protect significant interior and exterior features while incorporating energy efficiency and flood proofing measures.

After this assessment is complete, we would look at the **overall campus planning strategies** in which we would tackle the following tasks:

- **Develop strategies for floodproofing the buildings that are to remain.** This would be fairly schematic and would be based on information we have been gathering on the current studies for the Environmental & Agricultural Lab flood proofing study. There are three possible options, and from our experience with looking at the Agricultural & Environmental Lab, a perimeter flood wall set away from a building is probably the most feasible. However, this should not be mistaken for advocating a large flood wall around the entire site, which is not a feasible option.
- **Develop strategies for Campus Heating and Electrical Distribution Systems:** We would work with the LN Consulting engineers, along with Energy Balance, to create utility infrastructure information associated with each existing building and proposed campus options, including a new building and CHP (combined heat and power) plant. We will be working to develop an accurate depiction of existing and proposed campus energy use and distribution for multiple scenarios. Including within the scope of work would be existing conditions field survey of existing power plant systems and utility infrastructure; power plant renovation and replacement, heating and electrical distribution utility renovation and replacement. Energy Master Plan Report indicating energy transport loads (mechanical and electrical). This work will be closely integrated with the overall Campus Planning. We will develop an analysis for existing central plant options in order to provide the State of Vermont with appropriate alternatives (including CHP) with life cycle cost analyses. We will also develop alternative energy production technology options along with associated systems sizing and siting requirements to allow life cycle cost assessment.

- **Develop proposed Site Master Plan:** The question we will always keep in mind is "What are the potential opportunities for the site?" We will evaluate opportunities to unify the site and create high quality outdoor spaces that both honor the historic buildings and set the stage for any new construction that might be added. Pedestrian circulation and parking would be addressed in a fashion that distributes parking efficiently, maximizes open space and reduces the long range maintenance costs to the state by consolidating paved areas. This is an exercise similar to master planning a small college campus. The scope of work would include location(s) of possible new buildings, parking, walks, connection to and relationship to Town, and creating a sense of place, recognition of historical significance, landscaping, and how to integrate required flood proofing measures with the overall plan. We will integrate engineering concepts as noted above for utility requirements and campus wide energy solutions for existing and proposed campus buildings.